

TRANSFER AND ARTICULATION IN THE 1990s

CALIFORNIA IN THE LARGER PICTURE



CALIFORNIA POSTSECONDARY
EDUCATION COMMISSION



Summary

The viability of the community college transfer function is being challenged once again in many states and nationally -- particularly in regard to its effectiveness in providing access to the baccalaureate degree for historically underrepresented groups in higher education that are most likely to enroll in urban community colleges.

This report attempts to put California's current efforts to find solutions to its problems of transfer and articulation in the broader context of national concerns

Following a brief summary and overview, Part One sets forth a series of conclusions and six recommendations for action by the University of California, the California State University, the California Community Colleges, and the Commission itself.

Part Two describes recent developments in seven states -- Arizona, Colorado, Florida, Illinois, Maryland, Texas, and Washington -- that are attempting to improve transfer and articulation processes

Part Three summarizes research and writing about transfer from a national perspective

Parts Four and Five deal with specially funded efforts to improve transfer and articulation -- Part Four describing federal and foundation funding, and Part Five discussing various activities and programs that are being undertaken in California itself

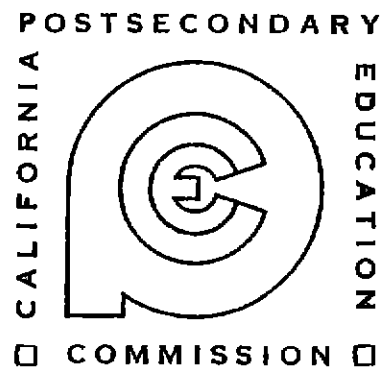
Three appendices describe the transfer efforts of the University of California and the California State University and list grants to research projects from the Organization of the State Higher Education Executive Officers

The Commission adopted this report at its meeting of December 10, 1990, on recommendation of its Policy Evaluation Committee. Additional copies of the report may be obtained from the Publications Office of the Commission at (916) 324-4991. Questions about the substance of the report may be directed to Dorothy Knoell of the Commission staff at (916) 322-8015.

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California in the Larger Picture

CALIFORNIA POSTSECONDARY EDUCATION COMMISSION
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1

Conclusions and Recommendations

Summary and overview

One of the principal foci of the recently concluded Master Plan efforts in California has been the importance of the transfer function. The first stage of the Master Plan review process, which focused on the California Community Colleges, clarified that transfer and vocational education are the two overriding functions of the community colleges. The second stage of the review process focused on the four-year segments and on the whole "system" of postsecondary education, and the transfer function became a central part of that effort as well. The review resulted in legislative action to codify agreements about the transfer process. Although the legislation was vetoed, the extensive discussions that surrounded it have not been wasted effort, as the segments are committed to moving forward cooperatively on these initiatives.

In this report, the Commission seeks to characterize the status of State-level discussions about the transfer function, identify the critical next steps that must be carried out to move forward on efforts to improve transfer, and suggest roles and procedures to expedite that process. It also provides a context for thinking about the state of the transfer function in California by presenting information obtained from an overview of research being done both in California and nationally on these issues. The insights obtained from the national literature will be instructive to California's institutional and State-level policy makers as they collectively attempt to move forward on the common goal of strengthening the transfer function.

Current status of State efforts: the veto of Senate Bill 507, and next steps

Much of recent statewide policy-level efforts on the transfer function have centered around discussions and negotiations on Senate Bill 507 (Hart, 1990),

the legislation to implement the Master Plan policy on transfer. Although that legislation was vetoed by the Governor, citing concerns about its fiscal consequences, the policy goals contained in it have widespread support, and the segments are expected to move forward to the extent they can to implement it.

The legislation was comprehensive and has many facets that will need to be implemented in successive steps. These elements, listed below, can be characterized as (1) overall institutional policy on student access, (2) implementing procedures affecting the admission and course articulation processes, (3) implementing procedures affecting student services, and (4) evaluation of the effect of these policies on the transfer process, including research on how best to measure the effectiveness of the transfer function.

Institutional policy

- 1 Each community college student is to be assured of the opportunity to enter into a transfer agreement program enabling that student to receive high priority consideration, attain "equivalent special treatment" or enter into a contract to apply for university admission at the advanced standing level. All students who wish to transfer who meet admission requirements -- whether or not they have participated in "transfer agreement programs" -- shall be guaranteed a place somewhere in the University of California or California State University system.
- 2 The following admission categories are to be established, insofar as practicable, in the following numerical order for purposes of undergraduate admissions planning: (1) continuing undergraduates in good standing, (2) community college transfer agreement program students, (3) other community college transfer students, (4) other qualified transfer students, and (5) California resident freshman or sophomore students.

- 3 The State's two systems endeavor to reach and maintain a ratio of 40 percent lower-division to 60 percent upper-division students, while continuing to assure access to qualified freshman applicants to the system.

*Implementing procedures affecting
the admission and course articulation processes*

- 1 Each governing board shall oversee the development of transfer agreement programs, formal systemwide articulation agreements, and other procedures to support and enhance the transfer function. These must include formal intersegmental faculty curricular efforts.
- 2 Each department, school, and major is to develop discipline-based articulation agreements and transfer program agreements for those majors that have lower-division prerequisites.
- 3 Students who have successfully completed transfer agreement programs are to be accommodated at their campus and major of choice, unless space is not available. For impacted majors, the course of study and minimum grade-point average for required consideration for upper-division admission may be higher than for other majors, providing that these expectations and standards are well communicated to students.

*Implementing procedures
affecting student services*

- 1 The following general support services shall be broadly integrated into comprehensive transfer programs.
 - Coordinated counseling,
 - Financial aid and transfer services,
 - Specific efforts to improve diversity,
 - Early outreach efforts, and
 - Expansion of current efforts relating to concurrent enrollment of community college students in appropriate university courses.

Evaluation of transfer efforts

- 1 The three governing boards are to present annual statistical reports via the Postsecondary Education Commission to the Governor and Legislature on transfer patterns, such reports are to include specified data on all aspects of the application and enrollment process for freshman as well as transfer students.
- 2 The Commission is to convene an intersegmental advisory committee on transfer access and performance for the purposes of presenting biennial reports to the Governor and Legislature on the status of transfer policies and programs. The reports shall include information about
 - a. The status of implementation of the transfer core curriculum and the availability of sophomore-level courses,
 - b. Progress in achieving articulation agreements,
 - c. The effectiveness of transfer agreement programs and activities in enhancing the transfer function overall, and
 - d. The extent to which the activities have been directed at students historically underrepresented in higher education.

By April of 1993, the Commission shall present a comprehensive report on the effectiveness of State policy in expediting transfer, including recommendations about how to define transfer rates.

**Major conclusions from
the national literature on transfer**

The viability of the community college transfer function is being challenged once again in many states and nationally -- particularly in regard to its effectiveness in providing access to the baccalaureate degree for historically underrepresented groups in higher education that are most likely to enroll in urban community colleges.

Questioning the viability of the transfer function arises from the following concerns

- 1 How to define and measure accountability in regard to the State's goals for transfer,
- 2 Relative priority or emphasis placed by community colleges on the transfer function in relation to vocational/technical and adult/continuing education,
- 3 Adequacy of opportunity for transfer students from historically underrepresented groups from both rural and urban areas to succeed in the universities,
- 4 Quality of instruction and academic standards in the community colleges, and
5. Efficiency of the function in producing baccalaureate degrees, including rates of transfer and degree completion and time to degree

Among these five concerns, the most serious is probably in the area of educational equity -- the extent to which community colleges are able to close the gap in baccalaureate-degree attainment that now separates Black, Latino, and Native American from Asian and White students, rural and inner-city from students in suburban community colleges, and financially needy "first generation" students from middle-class students with college-educated parents

General conclusions as they affect current efforts in California

There is a pervasive feeling of concern about transfer and articulation between California's community colleges and its public universities --

- About the numbers who are transferring, particularly Black and Latino students,
- About access to university campuses and programs of choice for community college students who have successfully completed transfer programs,
- About the evaluation of community college courses to satisfy graduation requirements, and

- About consistency in quality of community college instruction and the application of baccalaureate-level standards

Perceptions -- both positive and negative -- tend to outweigh objective information relating to each of these issues. There is no simple or single solution to what appears to be "the transfer problem," and good-faith efforts of all are required in order to increase numbers and at the same time smooth the transition of students between segments

There is no lack of budgetary and statutory proposals to help solve a problem that has been neither defined clearly nor quantified. But what is the real problem? Is it a lack of opportunity for transfer students to enroll on the university campus and in the program of choice or inability to take advantage of alternative opportunities? If so, what is the magnitude of these access problems? Are potential baccalaureate-degree graduates failing to enroll in transfer programs or being discouraged from applying for transfer admission because of these perceptions? Are community colleges offering the courses that students need to transfer with junior standing? Are those who do transfer academically prepared to succeed?

As these questions show, there is no specific agreement about the "transfer problem." But one theme persists: the extent to which qualified and interested community college students who have completed a lower-division transfer program have appropriate opportunities to complete a baccalaureate-degree program. To the extent that these opportunities are not adequate, or to the extent that the "system" fails to support student transfer, then the premises of the Master Plan regarding differentiation of function among the segments with regard to freshman admissibility will need to be revisited in order to ensure that the State is producing both an adequate and a well diversified group of baccalaureate-degree recipients

Recommendations

The Commission offers the following recommendations to ensure adequate transfer opportunities and maintain differentiation of function:

1. The University of California, the California State University, and the California Community Colleges should agree on a structure for coordinating the development of plans to implement the major provisions of the legislation to improve transfer and articulation that they agreed to in Senate Bill 507 -- and then actually develop these plans. These plans need to recognize the limitations of resources to accomplish all goals simultaneously, and should identify those activities that can be accomplished within existing resources as well as those for which coordinated efforts to increase needed funding will be required. These plans should be put into the form of reports that should be transmitted to the Commission by June of 1991 for review and comment. The Commission should then transmit the results of this review to the Governor and to the Legislature.
2. The University, the State University, and the community colleges, should continue to consider new approaches to improving the transfer function not specifically contemplated by SB 507, in order to expedite the progress of the State in meeting its policy goals. For instance, particular attention might be given to identifying transfer-interested students already in the "pipeline" who appear to be falling out of the system for no apparent reason as a first order of priority, followed by more comprehensive planning efforts for the harder-to-reach students. The implementation plans should include identification of such alternative efforts, as well as the efforts specifically prescribed by the legislation.
3. The Commission should monitor and evaluate the segmental progress in implementing their plans, with periodic reports to be made to the Governor and the Legislature on these and related matters.
4. In addition, the Commission should convene an intersegmental advisory committee to coordinate the collection of data to be used in an annual statistical report on the transfer function. This report, which should be submitted to the Governor and Legislature in the fall of each year on the same schedule as the Commission's "Student Profiles" report, should include data on (1) the flow of transfer students by ethnicity, gender, and campus; (2) application, admission, and enrollment rates for transfer students as well as for native first-time freshmen; and (3) retention and degree completion for all students.
5. In Fall 1993, the Commission should prepare a comprehensive report on the transfer function, including a summary of recent steps to expedite transfer in California, commentary on what is being learned from other states and national research, and recommendations about possible changes in State policy direction and future resource requirements.
6. Finally, in coordination with other states and institutions, the Commission should seek to learn more about the enrollment patterns of California students who transfer to institutions in other states. One particular focus might be the historically Black colleges, to learn what can be done to make the transfer function in California colleges and universities more attractive to students in the transfer pipeline who will make choices now and in the future. An additional purpose would be to attract Black and Latino students back to California after graduation to prepare to teach in the public schools and postsecondary institutions.

2

Recent Experience in Other States

THE TRANSFER function has become a matter of national concern -- particularly among community college leaders -- but the issue is not equally important to all 50 states. They vary on many dimensions that are related to transfer and articulation -- for example, the two-year colleges' structure, strength, and mission in the state's system of postsecondary education, the ethnic and economic composition of the state's population, enrollment growth (or lack of it) in relation to the availability of space, and academic standards generally. There is widespread concern among community college people about what they perceive to be uncertainty facing their transfer students -- lack of assurance that they will be able to enroll in the major of their choice, fear of unfairness of treatment in regard to the acceptability of their transfer credit and the need to repeat courses, and confusion about the availability of student aid at four-year institutions.

Because of its increasingly diverse population, California appears to be more concerned than most other states about the limited success to date of its community colleges in enrolling students from under-represented ethnic groups to complete transfer programs and move on to the baccalaureate degree. California's greater concern arises in part because of the larger proportion of Black and Latino students who are enrolled in community colleges, compared with the proportions who enroll directly in four-year institutions as freshmen. *Of all who attend college*, a large majority of California's Black and Latino youth are in community colleges, compared with a bare majority (or less) in other states. More selective freshman admission requirements for California's universities is one important factor that accounts for this difference.

California also differs from most other states with comparable systems of community colleges in regard to the statutory authority of its state agency that is responsible for higher education planning and coordination. Unlike the California Postsecondary Education Commission, the state agency in many other states has power to adopt regulations and establish policies that implement legislative in-

tent in the areas of admission, transfer, and articulation -- for example, in Colorado, Washington, and Illinois.

The following are brief descriptions of what is occurring in seven states where transfer is an important function of the community colleges and essential to the overall success of their higher education systems in terms of student flow from high school to the baccalaureate degree.

Florida

Florida is probably the most highly regulated among the states to be described, with direct legislative intervention into matters relating to student flow and assessment, and regulation by the State Board of Education to implement statutes. (The Postsecondary Education Planning Commission serves more in the capacity of a research and policy analysis arm of government than as a regulatory body.)

The associate in arts degree guarantees an opportunity to transfer from Florida's community colleges to one of the public universities with full junior standing. What had been a voluntary agreement for some time has now been enacted into statute, but the guarantee is not applicable to a limited access or teacher certification program, or a major program requiring an audition. This guarantee assures priority over applicants who are out-of-state students. However, students must pass statewide competency exams before receiving this associate degree or -- in the case of university students -- before moving into the upper division. Florida has now found that students earning a non-transfer associate degree in an occupational field are increasingly interested in working toward a baccalaureate degree and a route has had to be developed for them as well. What is required for transfer for this new group of degree-seekers is (1) completion of at least 60 units of transfer credit, including additional work in general education, and (2) passing of the

competency exams -- which is required for the transfer degree

Florida is more highly dependent on the community college transfer function than most other states since its regional universities were established as essentially upper-division and graduate institutions. While they have recently been permitted to enroll larger numbers of freshmen, their chief source of undergraduates continues to be the community colleges. Expansion to accommodate growth is taking place primarily in the regional universities -- and largely in permanent facilities that are being specially constructed for this purpose on or adjacent to community college campuses (California Postsecondary Education Commission, 1990). The University of Florida -- the flagship institution -- is a single-campus operation that offers only limited access to some of its specialized programs and is rather isolated geographically from the population centers of the state. Florida State University is also essentially a single-campus institution that can accommodate only a limited number of students in specialized programs. Thus the guaranteed transfer rights of community college students translate for the most part into easy access to the six regional universities and their off-campus centers that offer degree programs and tend to be in or near the major centers of population.

The common course-numbering system appears to have originated in Florida -- urged upon the colleges and universities by the registrars and admissions officers and mandated and funded in due time by the Florida legislature. It embodies a statewide, state-level approach to numbering courses commonly taught in the lower division by both two- and four-year institutions and utilizes statewide committees of faculty members in the various disciplines in which numbers are assigned. Institutions bear the expense of having faculty members serve on committees, but the benefits to course articulation from doing so often outweigh the development of common course numbers. In any case, those who know the system will point out that common course numbers are just one tool in facilitating transfer and do not eliminate the need for articulation agreements between institutions that specify how commonly numbered courses can be used to satisfy baccalaureate degree requirements.

Like California, Florida has a large and growing population of Black and Latino young people to be

served by the public schools and colleges. Its historically Black Florida A and M University in the state capitol serves mostly undergraduates who enroll as freshmen and its enrollment is growing rapidly. The community colleges are now integrated in regard to both faculty and students -- having once been a dual system of Black and White colleges -- but there is some evidence that Florida's pervasive testing programs at all levels are a deterrent to the flow of Black and Latino students into and through higher education.

Much can be learned from the Florida experience that is helpful as California tackles its problems of access and equity, but its particular solutions are not necessarily to be regarded as models for California.

Arizona

Arizona offers an interesting contrast to California and Florida because of its relative simplicity -- only three state universities and only 16 community colleges, 8 of which are in a single district in the Phoenix area, and another of which is a college that was established for and by the Navajo Indians. Arizona also differs from California in that it does not have a state agency that is comparable to the Commission. Instead, the Arizona State Board of Regents governs the public universities and the Arizona State Board of Directors for Community Colleges has certain statutory responsibilities for these locally financed and governed institutions.

Transfer and articulation matters are the concern of a Joint Conference Committee of the two state boards that in turn established an Academic Program Articulation Steering Committee (APASC) in 1983, with membership from the three public universities, three community college representatives, and staff from the two state boards. APASC oversees the work of various Academic Task Forces that work on program articulation in specific disciplines and prepares an annual *Handbook for Articulation Task Forces*.

Still another activity under the jurisdiction of the Joint Conference Committee is the publication annually of a *Course Equivalency Guide* that shows the courses offered by each community college that are judged to be equivalent to those that each of the

three public universities offers, together with those that are acceptable for elective credit and any special conditions -- for example, a requirement that a course grade must be above the minimum satisfactory grade. Except for the *communication* of information about transfer admissions, the work of these statewide groups is primarily in the area of course and program articulation.

A recent, major accomplishment of the Joint Conference Committee was its adoption of the Transfer General Education Core Curriculum on February 21, 1991. It had been developed by a General Education Articulation Task Force that worked with guidance from the Academic Program Articulation Steering Committee, that in turn submitted the curriculum to the Committee for adoption. Transfer students who pursue the curriculum are assured that a minimum of 41 semester hours of lower-division general education coursework will fulfill such requirements at all of the state's three public universities, if they also meet established institutional admissions standards and admission criteria for specific majors and programs at the university.

All this tends to convey an impression of a well-organized, highly systematized set of processes for insuring good articulation. In reality, the major flow of transfer students is from the multi-college Maricopa Community College District to Arizona State University, which is highly dependent on these colleges to provide lower-division education for more than one-fourth of its undergraduates and which has developed extraordinary collaborative agreements with the local community colleges over a long period of time. Arizona State has in fact established a new West Campus in Phoenix that will further facilitate transfer and articulation.

Northern Arizona University in Flagstaff offers still a different perspective on articulation and collaboration. In its efforts to provide greater service to the people of Arizona, it has established an off-campus center at Arizona Western College in Yuma where there is joint use of facilities.

Colorado

The Colorado legislature has given a good deal of statutory responsibility for transfer and articulation to the current Colorado Commission on Higher

Education which adopts regulations to carry out legislative intent. Its system of higher education is complex given its size, since there are multiple governing boards for its universities and a state board for community colleges -- most but not all of which are part of a state system, as opposed to being governed by local boards. The state board for community colleges also serves as the state board for vocational/occupational education. While the legislature has given the Colorado Commission specific responsibilities in admissions and articulation, it retains an active interest in these matters and demands accountability from the Commission for carrying out its intent. At the same time, the Commission lacks powers of enforcement and must often rely on the good-faith efforts of the colleges and universities to help in developing policies and programs that are consonant with the intent of the legislature.

Transfer is an important function of the Colorado community colleges, and access to the baccalaureate degree by their students is essential to the overall success of the system at a time of rising standards for freshman admission to the universities and limited state revenues to fund public higher education.

Nearly five years ago, community college leaders in Colorado identified the need to have by Fall 1988 a common core of general education for the associate in arts and sciences degrees in all community colleges that would be mandated by the Commission to serve as a statewide transfer agreement for meeting the general education requirements of the baccalaureate degree. The solution to the problem was reached by a consortium of all two-year colleges -- "dedicated to excellence in general education and to the development of a statewide transfer agreement" -- that sought and received funding from the Commission under its state-funded Program for the Promotion and Encouragement of Excellence for this purpose. The project was housed at Arapahoe Community College and hired its own director who reported to a Consortium Council on which the State Board for Community Colleges had one representative.

The project was carried out cooperatively by the community colleges, without the direct involvement of the universities to which their students transfer, and its results were reported to and then adopted by the Commission as part of a statewide Transfer

Policy in March 1988 This also entails agreements on the General Education Core Transfer Program that have been signed by the two- and four-year institutions to ensure access for those who wish to satisfy the general education requirements for most baccalaureate degree programs while enrolled in a community college

The general education project is but one of many activities undertaken or sponsored by the Commission in fulfilling its responsibilities in establishing statewide transfer policy under House Bill 1187. Others that are described in a Commission item for its meeting of March 5, 1987, include

- 1 An audit of the transcripts of transfer students at each four-year institution,
- 2 A compilation of information about the number of credit hours required by transfer students for graduation, compared with those that attend a single four-year institution -- supplied by the governing boards,
- 3 The convening of a task force on the development of a statewide student transfer information system,
- 4 The convening of a task force to discuss general education, the undergraduate curriculum, and transfer, as recommended in a Commission report on teacher education, and
- 5 Support and assistance to the State Board for Community Colleges in its project to develop a core curriculum for its 15 colleges through the Quality Incentive Project Consortium

Maryland

In March 1990, the Maryland Higher Education Commission 1990 adopted *Student Transfer Policies* that supersede the transfer policies in effect since 1972 and modified in 1979. The policies and procedures apply to admissions, credit transfer, program articulation, and related matters for all undergraduates wishing to transfer between Maryland's public colleges and universities. The policies call for the development of "recommended transfer programs" between *specific* two- and four-year institutions in the framework of the Commission's statewide policies. It also recognizes that each institu-

tion has a "separate and distinct mission" and thus has responsibility for establishing "standards of expectations for courses, programs, certificates, and degrees" that are consistent with that mission. The Commission emphasizes in the policy statement that the student is the intended primary benefactor and that the needs of students should be a primary concern in developing articulation procedures, while maintaining the integrity of educational programs.

The policy governing the admission of transfer students appears to be of greatest interest. It states that students who have completed an associate in arts degree (or 56 semester units of credit in college and university parallel courses with a grade-point average of at least 2.0) "shall not be denied direct transfer to an institution," except if the number seeking admission exceeds the number who can be accommodated in a particular professional or specialized program, or certain circumstances exist that limit the size of an upper-division program or total enrollment. In these cases, admission decisions will be based on criteria developed and published by the receiving institution, providing fair and equal treatment for native and transfer students. The policy also states that the associate in arts degree should meet the minimum lower-division general education requirements of the receiving institution while allowing the institution awarding the baccalaureate degree to require both transfer and native students to take some additional work in general education. Finally, students without an associate degree or with fewer than 56 units and who were not admissible to a four-year institution as freshmen must earn sufficient credit to transfer with at least sophomore status and, in addition, meet any stated admissions criteria of the receiving institution -- recognizing that these may vary by program.

Other components of the Maryland Commission's *Student Transfer Policies* deal with credit transferability and set forth principles to "promote academic success and general well-being of transfer students" and policies for "maintaining programmatic currency, student appeals, and periodic review." As in Colorado, the Maryland Commission asks each Maryland institution to designate a Transfer/Articulation Coordinator. The Maryland Commission itself has a permanent Transfer Advisory Committee to review transfer issues and recommend policy changes as well as arbitrate dis-

agreements involving student appeals regarding unfair treatment in the institutional application of these policies

State of Washington

In Washington, what is now the Higher Education Coordinating Board relies a good deal on the independent, voluntary Intercollege Relations Commission of the Washington Council on High School-College Relations. Established in 1970, that commission has membership from both public and private postsecondary institutions in Washington and rotates responsibility for administrative staffing among its members, while relying on staff in the various institutions to conduct studies and develop recommendations for adoption by the Council and its members. The Commission and the Council do not *make* policy regarding transfer and articulation but are instrumental in developing policy recommendations for adoption by appropriate bodies.

The work of the Intercollege Relations Commission was acknowledged in the December 1984 document, *Policy on Inter-College Transfer and Articulation Among Washington Colleges and Universities*, produced by what was then the State of Washington Council for Postsecondary Education -- the predecessor of the Higher Education Coordinating Board -- that set forth the following four responsibilities of the Commission:

- Facilitating the transfer of students and credits between and among community colleges and baccalaureate colleges and universities
- Providing continuous evaluation and review of transfer degrees, programs, policies, procedures, and interinstitutional relationships which affect the transfer of students
- Providing ways to resolve disputes regarding degrees, course equivalencies, and other transfer-related problems between or among member institutions
- Promoting articulation among the programs and curricula of member institutions

The Council also listed three ways in which the Commission may fulfill its responsibilities, as follows:

- By establishing and maintaining Associate Degree Guidelines for interinstitutional agreements under which community college transfer degrees may be used to satisfy general education requirements of baccalaureate colleges and universities in the state of Washington
- By reviewing policies and procedures affecting intercollege transfer and recommending changes when appropriate
- By sponsoring conferences, seminars and other activities that promote intercollege cooperation and articulation

Subsequently published and widely disseminated as the "Washington Transfer Agreement," the Council's policy left a great deal of responsibility with Washington State's four-year institutions for determining the standards and requirements for admission as a transfer student and as late as July 1986, the Intercollege Relations Commission stated in a document on transfer that the agreements it was publishing "assure the transfer of credit, but not automatic admission, since each institution has separate admission criteria which are based on grades, test scores, and other considerations." This statement simply echoes state policy adopted by the Council for Postsecondary Education that "Transfer student admission will be determined following an assessment of academic performance and potential on the same basis as native students." How assurance of comparable treatment was to have been accomplished is not at all clear, and community college leaders have charged discrimination against their transfer students whose grades were "discounted" in the assessment process by requiring a higher community college grade-point average than is required of native students.

Washington's inability to give assurances or guarantees to transfer students must be put in a context of supply and demand -- over- and under-enrollment at public universities in different parts of the state and serious state revenue problems a few years ago. The University of Washington has operated on a single campus with limited facilities in Seattle, while Washington State University and others are located in somewhat sparsely populated areas and have had to develop branch campuses/centers where the people are who want to continue their education to the baccalaureate degree. Washington's new Master Plan seeks to redress some of this geograph-

ic inequality of opportunity but, in the meantime, there is considerable uncertainty about transfer opportunities

The state-adopted policy statement of December 1984 tends to emphasize (1) fair and equitable treatment of transfer students in comparison with that afforded native students, (2) publication and other means of communicating requirements, standards, and course offerings to students and the public, and (3) mutual respect and cooperation between and among institutions. All of this may have helped students obtain fair treatment in regard to accepting their transfer credit but did not assure their admission as transfer students. Hence legislative intervention has occurred periodically to give direction to the Council for Postsecondary Education in 1983 and later, when the Council was disestablished, to the new HEC Board that had simply reissued in February 1986 the policy that the Council had adopted little more than a year earlier. Recently the HEC Board has been engaged in studying and attempting to resolve many of the same issues of guarantees and incentives that California has been dealing with, but also with limited success.

Texas

The Texas legislature established the Higher Education Coordinating Board in statute in 1965 and directed it to develop and promulgate a "basic core of general academic courses" that, when taken by a student at a two-year college during the first two years of collegiate study, would be freely transferable among all accredited public institutions of higher education in Texas. Before describing how the Board has carried out this responsibility during the past two decades, staff offers the following context that may be useful in understanding how the Board operates. First, it serves in lieu of a state board for the community colleges that are structured not unlike California's before the passage of Proposition 13, with an Assistant Commissioner (staff) responsible for matters related to this segment. Second, the Board in 1985 took over responsibility for postsecondary technical and vocational education from the Texas Education Agency which had hitherto had responsibility for this function at

all levels. Finally, Texas probably has more governing boards for its public four-year institutions than any other state -- some of these institutions on several campuses but scarcely resembling California's two-university system.

Returning to the Board's statutory responsibilities for transfer and articulation, implementation of the development of the common core has not taken the form of a general education core but of a lower-division transfer curriculum in each of 16 career fields that should be applicable to the degree requirements of any four-year institution that offers a baccalaureate degree in that field. The 16 career fields are agricultural sciences, broadcasting, film, and related areas, business administration, criminal justice, dance, engineering, engineering technology, health education, home economics, journalism - mass communication, music, physical education, social work, speech communication, theatre arts, and visual arts. Except for a statutory requirement of 12 semester units in history and government, the 16 curricula include varying amounts of general education, requirements related to the major, electives, and total prescriptive credit.

These transfer curricula were adopted and published by the Board most recently in January 1988. They were developed with the assistance of both an overall advisory committee to review and evaluate existing policies and issues on the transfer of credit and career field-specific committees from institutions offering associate and baccalaureate degrees in these fields. What is interesting is that little is said about transfer admission beyond the Board's statement in *Transfer of Credit Policies and Curricula* that "Institutions which establish institution-wide enrollment ceilings or specific program enrollment controls may be exempted from certain of these general provisions by the Commissioner of Higher Education upon adequate justification." In other words, admission as a transfer student is not guaranteed, but students who are able to enroll after completing a prescribed program are assured transfer of their credit. Like Washington State and elsewhere, Texas has four-year campuses that are over-enrolled and others that would like to increase their enrollment -- the latter usually lower as student choices and often less accessible.

Illinois

Illinois is best described as a "system of five systems" of public higher education that is coordinated by the Illinois Board of Higher Education -- 50 locally governed community college districts, some with multiple campuses, and one state-operated college under the Illinois Community College Board, two University of Illinois campuses, two Southern Illinois University campuses, three Regency universities, and a Board of Governors system with five state universities. Also to be reckoned with in Illinois' network of postsecondary education are its 125 degree-granting private institutions, 21 of which are proprietary institutions and many of which participate in articulation activities with their public-sector counterparts.

One of the primary missions of the Illinois community colleges, as set forth in the Public Community College Act, is the provision of the first two years of coursework leading to a baccalaureate degree, but articulation has not been easy because of the high degree of diversity of individual institutions in regard to their general education and major field requirements. Likewise, the community colleges do not have identical general education requirements for their two associate degrees that are designed for transfer -- the only state mandate being that general education coursework comprise at least 60 percent of the two-year program.

The so-called Compact that the Board of Higher Education adopted in 1970 and which has been adopted subsequently by about half of the 12 public universities in Illinois is fundamental to the transfer function.

Public universities and nonpublic colleges and universities should continue to facilitate the transfer of students from community colleges. The Illinois Board of Higher Education views the public community colleges of Illinois as partners with baccalaureate degree-granting institutions in the delivery of the first two years of education beyond high school in this state. There is need for full acceptance and recognition of this development throughout the higher education community. In furthering this goal, all trustees, administrations and faculties of baccalaureate degree-granting institutions are requested to declare that a transfer

student in good standing, who has completed an associate degree based on baccalaureate-oriented sequences to be transferred from a community college in Illinois, be considered to have attained junior standing and to have met lower-division general education requirements of the receiving institution.

In the years immediately following its adoption, staff in each two- and four-year institution who were designated for this purpose began working together more formally -- although on a voluntary basis -- as the Transfer Coordinators of Illinois Colleges and Universities.

Although the Compact worked reasonably well for community college transfer students, issues related to transfer and articulation began to receive ever increasing attention as the 1980s ended. Although more than 139,000 community college students were enrolled in "baccalaureate transfer" programs in 1988, only 11,099 were awarded transfer degrees and only slightly more than 13,000 transferred to four-year institutions -- a number that includes some who had earned non-transfer degrees and others who transferred before completing lower-division work.

The Illinois Community College Board issued a paper in January 1989 that provided a comprehensive view of transfer and articulation policies and issues, together with recommendations for action statewide and at institutional levels. The 13 areas the paper dealt with are the Articulation Compact, general education requirements, program and course articulation, assisting minority transfer students, access to public universities for associate-degree graduates, academic advisement, changes in university requirements, reporting progress of transfer students, student transcript policies and procedures, accommodating nontraditional student populations, telecourses, dual credit enrollment courses, and articulating Associate in Applied Science degree programs. In addition, the Illinois Board of Higher Education issued a report on *Improvement of Minority Student Baccalaureate Achievement Through Transfer*, together with information from a comprehensive, longitudinal follow-up study of transfer students.

Most recently, staff at the Board of Higher Education has prepared the third in a series of background reports for its Committee on the Study of

Undergraduate Education -- this one on *Transfer and Articulation and Monitoring Student Progress*. The original committee that reported in 1986 believed that all levels of education should be viewed as components of an interdependent system but did not adopt policy statements on matters specifically related to transfer and articulation. The committee was reconvened in October 1989 to review the status of implementation of its earlier recommendations that had been adopted as Board policies and to recommend any needed additions or modifications. It will report to the Board in September 1990. The Committee takes the position that associate- and baccalaureate-degree granting institutions are *equal partners* in providing the first two years of baccalaureate-degree programs and that institutions must work together to assure that their programs are comparable in scope, quality, and intellectual rigor -- while stopping short of a common core general education program.

Community college students are strongly encouraged to complete an appropriate associate degree program for transfer but (1) do not have unconditional admission to such programs and (2) are not guaranteed admission to the institution and major of their choice upon completing the degree program. The authority to set minimum entrance requirements for all public institutions of higher education was given to the Board of Higher Education in its enabling legislation in 1961. Under Board policies adopted in 1986, with a legislatively established effective date of Fall 1993, community college students wanting to enroll in full standing in a transfer-degree program must be high school graduates who completed four years of English, three years of

social studies, three years of mathematics, three years of science, and two years of electives in foreign language, art, or music -- with prescriptions in each category to assure an academic emphasis. Entering students must also make satisfactory scores on the college's basic skills assessment program and for placement in college-level English and mathematics courses. The intent was to give a clear signal to high schools of what is expected in terms of high school preparation -- not a *new* standard, but more specific than the statutory provision that students in transfer programs 'have ability and competence similar to that possessed by students admitted to the state universities for similar programs' (Illinois Public Community College Act of 1961). Students who do not meet these minimum entrance requirements may be admitted provisionally to a transfer-degree program, with conditions to be met before qualifying for regular standing, or to a non-transfer program.

On the second point regarding assurances to transfer students, Illinois has worked more diligently to secure full junior standing and acceptance of general education and other coursework for degree credit than to guarantee admission to the institution and program of choice for transfer students. The principle of fair and equitable treatment of native and transfer students is supported but not applied in any meaningful way in regard to admission. Some university campuses and a number of programs -- most of all in engineering and business administration -- have limited capacity to enroll new undergraduate students, and the challenge in Illinois, as in California, is to seek a good match between student choice and institutional capacity to enroll.

Research and Writing from a National Perspective

Writing about transfer

Much is being written about transfer and articulation that is research based, but whose purpose is not simply to report the results of original research. In books, monographs, and journal articles, persons knowledgeable about community college education are writing in a vein that is critical or at least questioning about the viability of the transfer function in the late 1980s.

"While the flow from two- to four-year colleges has never been a flood, what was once a steady stream has recently been reduced in some institutions to little more than a trickle." So wrote a former program officer at the Ford Foundation that funded many programs to improve transfer, in 1986 in an article titled "The Devaluation of Transfer: Current Explanations and Possible Courses" (Bernstein, 1986, p. 32). From research and reporting done by others, she concludes that transfer rates declined between the 1970s and the 1980s but not for the reasons usually cited by community college administrators -- student-centered explanations. She notes that student aspirations continue to exceed behavior in regard to transfer and completion of a baccalaureate degree, and that interest in that degree is growing among students in occupational or non-transfer programs. She also cites national data that show about three-fourths of the community college students coming from the top half of their high school graduating class and concludes that the decline in transfer cannot be attributed solely to students' inadequate preparation.

Bernstein suggests instead that explanations for some transfer rates are more likely to lie in (1) an institutional climate in community colleges that undermines student aspirations, (2) academic standards that are based on others taking the same course, rather than mastery, (3) use of quick-score objective tests, rather than written work as a basis

for grading, (4) limited faculty and administrator support for transfer as an institutional priority or for transfer student aspirations, (5) funding based on "seat-time" that discourages low-enrollment, sophomore-level courses, and (6) a breakdown in articulation among the segments -- although she found no evidence that simple agreements between institutions produce higher transfer rates.

Ending on a positive note, Bernstein concludes that there is "convincing evidence" that community college students continue to aspire to the baccalaureate degree and are prepared to spend a considerable period of time in pursuit of it. She challenges both two- and four-year institutions to "make that journey as efficient, educationally rewarding, and challenging as possible" (p. 39).

More about the problem

In *Bridges to Opportunity: Are Community Colleges Meeting the Transfer Needs of Minority Students?* Pincus and Archer (1989) assert that "The transfer function of community colleges is in crisis" and, after noting that transfer rates vary among the states and transfer data are limited, question the degree to which community colleges provide channels of upward mobility for historically underrepresented groups, including low-income students. They then ask what can be done to change this and make the following nine recommendations that are based on two research endeavors reported in some detail in their monograph -- an upper-division scholarship program and an urban community college transfer opportunities program, both funded by the Ford Foundation -- and other research findings:

1. The transfer function should be the central -- but not exclusive -- role of community colleges.
2. The culture of the urban community colleges should be transformed to emphasize intellectual rigor and critical thinking.

- 3 Urban community colleges must aggressively promote the development of a vibrant on-campus community, especially for minority students
- 4 Dual admissions programs should be established so that students completing an approved associate-degree program will be guaranteed admission with junior standing to any public four-year institution in their state and will not have to repeat any courses taken in the community college
- 5 Data bases should be established and a common definition of "transfer" and "transfer student" should be agreed upon
- 6 Community colleges should upgrade their transfer curriculum and then promote these programs among high school students and staffs
- 7 Each state should develop financial incentives to reward community colleges with successful transfer programs
8. A special federally funded scholarship program should be established for low-income students who transfer to four-year institutions
- 9 Not-for-profit foundations should fund programs to enhance transfer rates

Like other writers, Pincus and Archer conclude that gathering transfer statistics is a difficult task because of lack of agreement on definitions and how to compute transfer rates, and inadequate student data bases generally. While most researchers agree that transfer has declined during the past decade, these authors conclude tentatively that in the 1980s, about three-fourths of the community college students said that they wanted a baccalaureate degree, one-third to one-half said that preparation for transfer was the main reason for their enrollment, and white/minority student differences in transfer aspirations were inconsistent.

Pincus and Archer also discuss declining transfer rates and rates of completing a baccalaureate degree, but their conclusions about actual statistics are more tentative in this instance than those cited relative to aspirations. They discuss reasons for low transfer rates and cite both student and institutional characteristics -- as did Bernstein -- and add the political and socioeconomic environment as a contributing factor. They explain this to mean the general state of the American economy in the 1980s in

relation to the 1960s, the contention that higher education was producing an over-supply of baccalaureate-degree recipients ("over-education" of the nation's youth), and a more conservative political climate at the federal, state, and local levels that hurt educational programs in general, and those designed to help disadvantaged students in particular.

The authors do not despair of making the transfer process work for traditionally underrepresented groups at the baccalaureate level. Instead, they point out that the transfer function is highly complex and affected by a multiplicity of factors, many of which require interinstitutional and intersegmental collaboration and transfer-enhancing activities that often require special funding.

An in-depth examination

In *The Diverted Dream: Community Colleges and the Promise of Educational Opportunity, 1900-1985*, Brint and Karabel paint a devastating picture of the growth of vocationalism in the community college segment and the resultant subordination of the liberal arts/ transfer function. Their thesis is well documented, with their historical research divided into three periods: 1900 to 1945, during which they found the emerging national leadership emphasizing the importance of vocational training as the community/junior colleges' primary function but with student preference for university-preparatory courses undiminished; from 1946 to 1970, in the middle of which California's Master Plan for Higher Education was developed as a model for many states as a hierarchically segmented system of higher education that limited access to the top tiers and tended to create a system of tracking that was closely linked to social origins, race, and family income; and from 1970 to 1985, at the beginning of which the media stressed the under-employment of college graduates with a baccalaureate degree, the student population became less "traditional," and vocational programs finally were increasing.

Brint and Karabel devote a full quarter of their book to what they call the transformation of the community college system of Massachusetts to vocationalism -- a process that took place at both the state and local levels. California receives an appropriate share of attention throughout the analysis, with particular emphasis on the Master Plan and its consequences for California and other states.

Commenting on the declining transfer rates for California and elsewhere, the authors observe that the "vocational community college was a particularly inhospitable institutional environment for transfer" although it was designed to divert students from the universities, as well as to provide a route for a selected few.

In their final chapter -- "The Community College and the Politics of Inequality" -- Brint and Karabel cite factors that have helped shape student choice -- a disproportionate allocation of resources to occupational education, selection for college presidencies of men committed to vocationalism, quota-setting in liberal arts programs, and guidance and testing practices. They conclude that "Barely functioning transfer programs may break down altogether, already astronomical attrition rates may increase, and private corporations may, through contract training, transform into virtual trade schools what were not long ago comprehensive colleges" (p. 232).

However, like other authors cited earlier, Brint and Karabel say that this gloomy scenario is not inevitable. They point out that the history of these two-year institutions is replete with contradictory pressures, and that they face a future that is to a considerable extent a matter of choice. They express their hope that choices will be made after public debate that will create "a genuinely egalitarian system of higher education that fosters the development of a citizenry fully equal to the arduous task of democratic self-governance" (p. 232).

National research on transfer

Examples of three kinds of research on transfer and articulation will be described that are either national in nature or involve a sample of states or sites in several states. The first is what might be called site-based in that it analyzed conditions in selected urban areas. National, longitudinal student data bases were the source for two statistical studies that will be examined next. Finally, two multi-state studies of policies, programs, and practices will conclude this section.

Site-based research

In *Fostering Minority Access and Achievement in Higher Education: The Role of Urban Community Colleges and Universities*, Richardson and Bender integrate research from two studies conducted in the 1980s in a total of 13 states -- Arizona, California, Florida, Illinois, Michigan, Missouri, New Jersey, New Mexico, New York, Ohio, Pennsylvania, Tennessee, and Texas (1987). Data were collected in state capitols and in urban areas in these states in which both community colleges and four-year institutions are located that enroll large numbers of students from underrepresented ethnic groups. The primary goal was to describe state policies and institutional practices that appeared to influence student persistence in pursuit of the baccalaureate degree. A major purpose was to describe those aspects of urban community colleges and university cultures that determine the effectiveness of the transfer process, together with any state coordinating board policies that create pressure for institutional cooperation. The intended outcome involved the identification of strategies for improving the transfer process for all students in urban colleges and universities.

Data were obtained from (1) structured interviews with college and university faculty and administrators and coordinating board officers, (2) documents that set forth transfer-related policies and practices, and information about articulation and cooperation, student preparation and achievement, (3) essays written by community college students in beginning English classes, (4) responses to a 24-item survey administered to a sample of students who transferred to a university, and (5) research reports, position papers, and fact books.

Richardson and Bender found that there are two dominant perspectives to the value differences in the university and the community college cultures. The university sees the community college as overly protective, conditioning students to inappropriate expectations. This supportive atmosphere is seen as injurious to transfer students, it creates dependency rather than self-initiative. The community college, on the other hand, criticizes the university as un-

caring or indifferent to the needs of urban students. The latter's attitudes and practices are seen as elitist and subversive of the supposed goal of equal access. The conflicting cultures and the barriers they produce fall most heavily on minority students' opportunities. Educators must come to grips with the reality of institutional cultures and their consequences for movement within a state's higher education system.

They also found that formal articulation policies in all states were designed to accomplish an orderly progression from lower- to upper-division work. This process is controlled at the operational level by the senior institutions, a fact resented by the community colleges. A predisposition to failure is linked to the university's preference to limit the influence of state coordinating boards on the curriculum. Variation in articulation practices is not easily explained by differences in policies established by state boards. State policies are not helpful in the absence of a commitment from key university staff. In the absence of such commitments, or where university-community college relationships are strained or hostile, institutions subvert detailed and carefully defined policies and ignore institutional agreements.

Richardson and Bender conclude that institutions can "intervene with color-free strategies that improve opportunities for all students while providing a particular boost for minorities" (p. 202), while acknowledging that external factors such as economic status and family structure all influence achievement. Based on their findings and conclusions, they make 29 specific recommendations for community colleges, 24 for urban universities, and 6 for state coordinating boards, some of which are reproduced below (pp. 207-219).

Selected recommendations for community colleges

The high level of commitment of urban community colleges to their clientele, along with their willingness to commit institutional resources to special support programs, make them critical actors in any attempt to reduce discrepancies between groups in educational achievement. Urban community colleges can be criticized for coming too close to constituting a class-based tracking system. They must be commended, however,

for their beliefs, their increasing sophistication in diagnosing and dealing with a broad array of learning problems, their willingness to put their resources where their philosophy takes them, and their success in recruiting a large percentage of minority faculty and administrators. A promising sign is the tendency of urban community colleges to rely more on institutional research in revising policy, rather than on philosophy. The community colleges seem to be increasingly aware of the need to improve their databases and to rely more heavily on that information in decision making.

- Maintain a full range of transfer courses scheduled according to some preannounced and guaranteed timetable to enable students to complete lower-division requirements on the campus of primary attendance without unreasonable delays.
- Award associate degrees in arts or sciences for the completion of any approved lower-division sequence of a four-year college or university to which students regularly transfer without the necessity of taking courses unique to the community college.
- Limit entrance to all transfer courses to students who demonstrate appropriate preparation in reading, writing, and math skills so that courses are comparable in difficulty to the baccalaureate offerings of major receiving institutions, assess all entering students interested in enrolling in any transfer course to ensure that they possess the requisite skills, require placement in remedial courses for any whose assessments reveal deficiencies, and permit students who are placed in remedial courses to exit to transfer courses only after demonstrating that they have remedied the deficiencies that led to such placement.
- Revise course requirements and grading practices in university-parallel courses to make them more comparable to those that the students will experience after transferring.
- Establish integration as a priority objective. (Facilitating attendance across district boundaries and providing free transportation between sites currently characterized by racial

imbalance represent potential strategies for addressing this priority)

- Balance the use of technology to individualize instruction with such human interventions as tutoring to ensure that students develop emotionally and socially while simultaneously mastering new competencies
- Provide educationally disadvantaged students with an attractive and challenging alternative to the last three years of high school as is done in middle-college programs of the type offered by LaGuardia Community College under joint sponsorship of the college and the New York City board of education

Selected recommendations for urban universities

Hiring more minority faculty members and administrators is seen as the most crucial step in making the universities more hospitable to minority students. The most coherent principles, not surprisingly, were articulated by universities serving a predominantly minority student population. These include orientation, proficiency exams, monitoring of student progress, and tutoring. Administrative commitment is evident in universities with improvements in minority success rates. Excessive fragmentation limits the effectiveness of many special programs, as well as the lack of coordination of these programs. Universities experience conflicting priorities in an environment of constrained resources, and this is reflected in their ambivalence about what they can or should do for marginally prepared students. Improving educational opportunities conflicts with the ideal of a self-directed and independent learner.

- Hold regular articulation meetings between administrators in related service areas, including financial aid, records, counseling, and admissions
- Encourage university faculty members to become better acquainted with the problems faced by inner-city community colleges and public school systems and arrange for faculty representatives from major receiving programs to visit related community college classes to improve the quality of information available to prospective transfer students

- Redesign the transcript evaluation process so that transfer students are provided with a single estimate of the credits that the university will recognize in relation to a stated program choice
- Sensitize faculty and administrators to the problems confronting minority students by employing more qualified minority faculty members and administrators
- Integrate special support services for minority students and those who staff them into the mainstream of university activity
- Develop cohesive, cooperative learning groups among new minority transfer students through block scheduling in courses and through residence hall assignments
- Encourage students who choose, or who are required, to attend a community college as their point of entry to higher education, to earn an associate in arts or science degree before transferring unless they plan to major in a field where this is not feasible

Recommendations to state coordinating boards

State coordinating boards influence institutional priorities through incentives or penalties. When supported by a strong database, boards use the planning and resource process as tools to encourage mission differentiation and to limit competition. What is required, above all, is institutional cooperation and the willingness to place state priorities above institutional interests. Motivating institutions to respond to educational needs from a system perspective requires determined, effective leadership from the boards.

Only statewide boards have the scope and authority to foster the necessary combination of moral leadership, consistency, and predictability in institutional practice, adequate resource allocation, and systemwide monitoring for accountability. Specific approaches vary as a consequence of state context and political history. Best results are seen in states that have implemented comprehensive and systematic programs aimed at improving both quality and access.

- Establish clear expectations that publicly funded two- and four-year institutions will, as

a priority, work closely together to provide opportunities for trouble-free transfer.

- Work to achieve common academic calendars among all publicly funded institutions within their respective states
- The associate degree in arts or science should be defined as the preferred credential for transfer. Students earning one of these degrees in an approved major should be guaranteed junior status at any public university in the state, subject only to space limitations. States should give serious consideration to adopting this recommendation in conjunction with some form of competency exam that would be administered to all students seeking status as upper-division undergraduates
- Create a common framework for numbering and titling courses intended to meet lower-division requirements for a baccalaureate degree that sets forth the following expectations:
 - 1 The same band of numbers would be used by all public institutions in identifying freshman and sophomore courses applicable to the bachelor's degree
 - 2 Only those courses clearly acceptable for baccalaureate credit by the state's public four-year institutions would be assigned to the specified band of numbers by community colleges
 - 3 Course titles and course descriptions would be as similar as possible across institutions
 - 4 Courses designed to meet comparable lower-division general education requirements would carry the same number of credit hours at universities and community colleges
- Consider establishing an articulation coordinating committee. As a minimum, committee responsibilities should include
 - 1 Overseeing the transfer process to include responsibility for defining articulation issues and advancing recommendations for their resolution to institutional governing boards and to the state coordinating board

- 2 Monitoring the continuity of academic programs and related institutional practices designed to facilitate transfer
- 3 Serving as an appeal board for students whose concerns about the award of transfer credit or other aspects of the transfer process are not satisfied through the normal institutional grievance procedures
- 4 Appointing working subcommittees comprised of appropriate institutional representatives to study articulation issues and to recommend solutions to problems
- 5 Obtaining access to institutional data necessary to the conduct of committee business

Student-based research

Two researchers have recently used national longitudinal high school student data bases to answer questions about transfer from community colleges and attainment of a baccalaureate degree. National samples of high school students who graduated in 1972 and 1980 comprised the data bases that were constructed by the U.S. Department of Education. Data used in these analyses were obtained primarily from high school and college transcripts and from surveys that were sent periodically to the student samples. While many researchers have made use of these data bases to answer questions about student aspirations and behaviors, two studies were selected for use in this report because of their focus on transfer from two-year institutions.

In "The Decline of Community College Transfer Rates: Evidence from Two National Longitudinal Surveys," Grubb concludes that transfer rates declined substantially between 1972 and 1980 for almost every group of students in his analysis. He acknowledges that trends may have improved in the late 1980s since the last data that were available for analysis were for the period 1980-84, and he attributes any improvement to the abandonment of laissez-faire practices by the community colleges in favor of aggressive programs and activities to enhance transfer.

Grubb's final section on "Death by a Thousand Cuts" does not reject explanations for declining transfer rates that lie in a slowed rate of progress through higher education or transitory labor market conditions but finds that probable causes also include. (1) the rise of vocational programs in the community colleges, (2) a weakening of the transfer-related associate degree that is related to the colleges' inability to offer sophomore-level courses and the students' inability to make adequate progress, and (3) what Grubb calls the problem of "milling around" by students who show idiosyncratic patterns of enrollment and choices of courses. Still another group of students who may be in part responsible for lower rates of transfer is -- in Grubb's terminology -- "experimenters" who "enter to see whether college is suited to them, but leave within a short period of time." Finally he cites demographic shifts in the student population in community colleges but denies that this occurrence accounts for much of the decline in the transfer rate.

Grubb found -- comparing the high school graduating classes of 1972 and 1980 -- that transfer rates declined for recipients of both academic and vocational associate degrees (from 68.7 to 48.9 percent for academic and from 31.7 to 23.2 percent for vocational, respectively) and for students who transferred without first earning an associate degree (from 18.3 to 14.7 percent, respectively). The only increase related to the associate degree was for recipients of vocationally related degrees -- from 9.6 to 11.4 percent. He also found that percentages of the various transfer student groups who completed their baccalaureate-degree program within four years after transfer had also declined very substantially. One additional finding was that the proportion of transfer students who had not earned an associate degree or certificate increased between 1972 and 1980 -- although current researchers tend to recommend that this achievement be encouraged but not actually required as a condition for transfer and that students be offered incentives for doing so.

As noted earlier, transfer rates were lower for the high school class of 1980 than for the class of 1972 for all groups studied -- men and women, Black, Latino and Caucasian; low, middle, and high socioeconomic status, low, middle, and high ability, and academic, vocational, and general curriculum tracks.

Grubb's findings are discouraging overall and his conclusion that declining transfer rates due to "a

thousand small causes" are "indicators of the health of the entire educational system" does little to brighten the outlook, but he stops short of recommending that community colleges abandon the transfer function. Instead, he suggests that work needs to be done to alleviate each of the possible causes of the decline.

Ten thousand students' transcripts

In a yet-to-be published paper titled "Using Transcripts to Validate Institutional Mission: the Role of the Community College in the Postsecondary Experience of a Generation," Adelman reports the results of his intensive analysis of the academic records of a large sub-sample of the high school class of 1972 that formed the National Longitudinal Study data base. This transcript sample was taken at age 30 and utilized responses to a series of five follow-up surveys that enabled researchers to track the enrollment records of these young people. Adelman observes that "transcripts neither exaggerate nor forget. People responding to surveys, however, do both" (1990, p. 1). Still, the surveys were the primary source of information about the institutions attended, from which transcripts were requested for analysis.

Adelman makes an important distinction between student declaration of interest in obtaining postsecondary education, plans for doing so, and behavior as recorded on institutional transcripts, with interest exceeding plans that, in turn, tend to go beyond actual behavior. His comments on the perceived status of the associate degree are also useful. Researchers and others tend to equate the baccalaureate degree with higher education attainment, and almost no one knows what the associate degree is or how to value it (neither high school students, their parents and teachers, nor community college students themselves). Thus he cautions about overinterpreting research findings that are based on expressions of student interest or intent, compared with what they actually do over time.

Some of Adelman's findings are relevant to transfer issues and questions. He found that 8.9 percent of the sample who entered postsecondary education attended a community college and earned a baccalaureate degree, but only half of this group also earned an associate degree. An additional 6.0 percent attended both types of institutions, but received nei-

ther type of degree. These statistics reflect various sequences of attendance, including one-fourth of the students who enrolled in a four-year institution before attending a community college, all by the age of 30. He found that few students in this sequence earned a baccalaureate degree, but that students who did not take time and earn credit for an associate degree were awarded their baccalaureate degree faster than those who did -- a finding that is not supportive of requiring the associate degree for transfer

Adelman makes the helpful observation that national research may be flawed because the tendency of Black students to attend historically Black institutions rather than transfer to research universities is overlooked in data analysis involving differences among races. He also notes the need to examine geographical and state-system factors related to transfer. Finally, he calls attention to the unreliability of student declaration of major or curriculum track while enrolled in a community college, compared with what can be learned from transcript analysis

The research that Adelman reports goes far beyond rates of transfer and completion of the baccalaureate degree. He states few conclusions and makes no recommendations but his commentary on the findings and conclusion of others who are using the same or other student data bases is instructive in raising questions about the implicit assumptions that undergird their analysis

National policy studies

Two national studies of state policies and practices in transfer and articulation were published recently -- one study by Commission staff with a grant from the Ford Foundation (Knoell, 1990) and the second under the auspices of the Board of Directors of the American Association of Community and Junior Colleges (Bender, 1990)

The Commission staff report, *Transfer, Articulation, and Collaboration Twenty-Five Years Later*, summarizes the results of interviews and documents analyses in eleven states in a way that compares conditions surrounding the transfer function in the 1960s, when there was a great deal less centralization of authority and state-level coordina-

tion, with the context for transfer and articulation in the 1980s. The report presents no recommendations but sets forth principles and guidelines for use by states, systems, and institutions of higher education in examining their policies and practices. Guidelines that were derived from the findings were developed in the following areas: roles of governmental entities; relationships between systems and campuses of two- and four-year institutions, collaboration among faculty, academic administrators, and student personnel officers, admissions, articulation, data bases and information systems, assessment, and affirmative action and educational equity. A number of the guidelines follow directly from the principles that (1) cooperative activities and voluntary agreements work better than legislative mandates and regulations, (2) incentives to improve have greater potential than threats of punitive actions, and (3) statewide agreements, policies, and practices that grow out of local or regional activities are more likely to be implemented than those that are promulgated without such grassroots involvement

Bender's study, *Spotlight on the Transfer Function*, attempted to survey all states by means of questionnaire, telephone interviews, and analysis of documents that embody state policy, statutes, regulations, and research on transfer and articulation. His report also includes case studies from New Jersey, Florida, California (the Los Rios Community College District and the University of California, Davis), and Texas. He makes a number of specific recommendations for action by Congress and state legislatures, as well as the Association that sponsored the study. Having concluded that four-year institutions discriminate against community college transfer students by making them repeat courses that they completed in the lower division, he recommends that Congress study "the injustices to federal financial aid recipients and the cost to taxpayers," and "deny federal funds to states that do not correct such injustices" (pp. 19-20). He also recommends that Congress investigate practices of regional and professional accrediting bodies that result in similar "injustices" to transfer students

Bender's recommendations to state legislatures call for less action to remedy wrong-doing than those he made in regard to Congress. He calls for increased statewide reports on transfer and articulation and suggests that states provide incentives for increas-

ing the participation of underrepresented minority groups, fund the development of comprehensive student data systems, and examine state financial aid programs to insure that institutional and accred-

iting-agency practices do not result in injustices like those implied in his recommendations to Congress

4

Nationally Funded Efforts to Promote Transfer and Articulation

BOTH philanthropic foundations and the federal government acknowledged the importance of strengthening the community college transfer function by funding a wide range of special programs during the 1980s -- some to support research and many to try out new approaches related to both the academic and student services aspects of the function. Unfortunately no one appears to have made a systematic effort to compile a listing of these specially funded projects -- neither staff in the funding agencies nor researchers on the topic. Therefore, the material that follows is drawn from a variety of sources: personal knowledge, collections of abstracts, and, in a few cases, published reports that describe programs and their evaluation. The development of a more complete listing of such projects does not appear feasible because of the personnel and other resources that it would require, and it seems unlikely that such efforts would add significantly to this report.

Projects funded from three major sources are described below -- the federal government's Fund for the Improvement of Postsecondary Education, the Andrew W. Mellon Foundation, and the Ford Foundation. Of the three, the Ford Foundation appears to have funded the largest number and range of programs, including two multi-site projects through the auspices of non-profit organizations.

Fund for the Improvement of Postsecondary Education

This federal agency in the Department of Education has made grants to educational institutions and others on a competitive basis for action-based projects for more than a decade -- including two grants to the Commission in the areas of community advisement centers and evaluation models for remedial programs.

While a complete listing of previously funded projects in the general area of transfer is not available, program staff were able to provide brief descriptions of 10 currently funded projects.

Brief descriptions of these projects follow.

University of California, Riverside

Offers an honors access program to 75 incoming minority freshmen and transfer students from community colleges. Provides a pre-freshman summer course, seminars, and research assistantships that will develop students' research skills, encourage their interaction with research faculty and motivate them to enter and complete the university's honors program.

Kean College of New Jersey (teacher education)

Develops a collaborative teacher education initiative to increase the success rate of Hispanic teacher education majors on standardized tests. Increases the ability of community college and four-year college faculty to work successfully with Hispanic students and reforms the general education curriculum so that it becomes more responsive to the needs of teacher education students.

Portland State University (teacher education)

Establishes Future Educators of America chapters for students from selected high schools and community colleges who are interested in teaching careers. Develops chapter bylaws, curriculum and teaching/tutoring experiences for members in efforts to develop their skills both as learners and teachers, motivate them to pursue careers in education, and enhance the transfer process from high school or community college to a university.

La Guardia Community College
(teacher education)

Recruits students into teaching through a pre-education major at the community college and a 2+2 articulation agreement with the Queens College School of Education. Internships and tutoring experiences supplement the students' coursework.

Holyoke Community College
(business management)

Establishes a dual admission program in business management at Holyoke Community College and the University of Massachusetts (Amherst) School of Business Management for linguistic minorities. Students are admitted based upon performance criteria and receive academic support services in preparation for their transfer from the community college's A.A. program to the university's B.A. program.

Bronx Community College

Establishes a four-city consortium to develop, assess, and disseminate programs for the transfer of students from two- to four-year colleges, engage in joint planning and cooperate in the publication of a book about successful city-wide transfer programs. Project is funded jointly with the Ford Foundation.

The four cities in the first phase of the project are Seattle, Phoenix, Miami, and the Bronx section of New York City. The consortium is being expanded to include San Antonio and Oakland, California.

Central Oregon Community College

Establishes a locally controlled consortium involving Central Oregon Community College and four-year institutions to provide upper-division and graduate education to place-bound adults. Assisted by an appropriation of funds from the Oregon state legislature. Coherent, affordable degree programs will be designed.

George Mason University (Virginia)

Provides a model articulation project in which faculty teams from a university and a community college work together on the design of general education core courses and also develop and field-test

methods of assessing the learning outcomes of students in the new core.

State University of New York, Plattsburgh

Organizes a formal transfer network of faculty, staff, and students to raise the quality of academic experience and increase the persistence level of transfer students. Includes faculty development, peer advisement, faculty exchange, skills tutoring, and "bridge" courses.

City University of New York

Proposes the development and implementation of the "Transfer Express," a three-year project designed to provide instruction for A.A.S. transfer at three CUNY colleges and at three national demonstration sites that have not yet been selected.

**The Andrew W. Mellon Foundation with
the Association of American Colleges**

A survey conducted in 1983 showed that one-third of the institutional members of the Association of American Colleges actively recruited transfer students from community colleges although one-third of this group had no formal articulation agreements. An additional one-third were considering a policy change regarding the recruitment of transfer students, and the remaining third expressed no such interest. Based on these findings, the Association made a proposal for and received a two-year grant from the Mellon Foundation to undertake a project that would (1) uncover and overcome barriers to transfer, (2) maintain enrollments in the four-year institutions, and (3) increase access for community college students from underrepresented groups. The final report of that project has been published as *The Transfer Challenge: Removing Barriers, Maintaining Commitment* (Wechsler, 1990). The report is intended to serve as a handbook to provide practical assistance to four-year institutions in their efforts to increase and facilitate the flow of transfer students into their programs.

The Association in turn used its Foundation grant to make sub-grants to 12 four-year institutions that worked cooperatively with 34 public community colleges. Eight of the 12 were independent and four

were public institutions, six were liberal arts colleges, three were universities, and three were comprehensive institutions. Some had been generally successful in attracting and working with transfer students, some had had "sporadic" success, and others were intending to get started. Of the 12, two were California institutions -- Occidental College that worked with Glendale Community College and Pasadena City College, and California State University, Hayward, that worked with Chabot College. The remaining independent institutions that received grants were Clark College in Atlanta, Jacksonville University in Florida, Kalamazoo College in Michigan, Knox College in Illinois, University of Miami in Florida, University of Puget Sound in Washington State, and Vassar College in New York State and -- among the public -- Temple University in Pennsylvania, University of Arizona, and University of Massachusetts, Boston.

Three overriding principles that the project found to be essential for successful articulation are commitment on the part of the leadership of both types of institutions, comprehensiveness of the efforts that need to be put forth, and institutionalization of the program. These principles in turn translate into five recommendations:

- 1 Presidential leadership in both the sending and receiving institutions,
- 2 Regular meetings of admissions officers, academic counselors, and financial aid officers within and between institutions,
- 3 Formal and informal exchanges between the faculties of both institutions,
- 4 Opportunities for community college students to spend time on the campus of the four-year institution -- talking with students, attending classes, and getting the feel of the place, and
- 5 Regular consultation between the staffs of the learning development centers to share information and understanding of the special characteristics of the transfer students.

The California projects

The California State University, Hayward, project with Chabot College produced an associate in arts degree in university studies with automatic transfer with junior status to the State University cam-

pus in Hayward. The curriculum is also said to meet the lower-division requirements of most public and independent universities and to be compatible with all majors offered at Hayward except music and computer science. Other aspects of the project funded under the Mellon grant were the creation of a transfer center at Chabot, a study of minority student transfer, an increase in faculty exchanges, a study of student interactions through the student associations on both campuses, and a study of student aid procedures.

In contrast with the California State University, Hayward/Chabot College relationship, in which more than 500 students transferred each year at the start of the project, Occidental College enrolled very few transfer students from two nearby community colleges -- Glendale and Pasadena. Problems internal to Occidental included uncertainty about how to reach transfer students, limited amounts of student financial aid, and insufficient transfer of credit. After a slow first year into the project, a meeting of the presidents of the three institutions produced an agreement that -- among other actions -- (1) designated the community colleges as "redirect institutions" where able but insufficiently prepared applicants to Occidental might do their lower-division work, and (2) gave special attention to students designated "honors at entrance" by the community colleges. The flow of transfer students to Occidental will never be large because of the availability of nearby, low-cost baccalaureate education at several State University campuses, but participation in the project has had a positive effect on the three institutions.

The Vassar College experience

One additional project under the Mellon grant deserves mention because the Ford Foundation subsequently funded its continuation and expansion as a model to other sites. Under the grant, Vassar enlisted as partners La Guardia Community College in Long Island City and five other community colleges in its geographic area. Building on a three-year relationship with La Guardia, Vassar established a comprehensive summer program for potential transfer students who completed their first year at one of these community colleges. The program targets students from underrepresented ethnic groups. Vassar staff believes that the community colleges enroll some students for whom barriers to

transfer were not academic, social, or financial, but the perception that a highly selective college like Vassar is "not for them." To overcome this perception, Vassar offers a five-week, residential, summer program for groups of 26 potential transfer candidates and related faculty. Two problems that colleges like Vassar encounter in implementing similar programs are financial cost, since students are fully subsidized, and institutionalization when colleges are no longer part of a specially funded project.

The success of the summer institute experience is demonstrated by the extremely high rate of transfer to and success in four-year institutions on the part of the participants -- not necessarily transferring to Vassar but to a wide range of public and independent institutions. Their summer course grades at Vassar ranged from A to C+, and students earned seven or eight academic credits in two or three courses. Staff knows of no plans at this time to replicate this high-cost program in California, but the model appears to be one that would work well in a number of our independent colleges.

The Ford Foundation Program

The Ford Foundation made the improvement of transfer and articulation a major program activity in the 1980s -- particularly in urban community colleges across the country and for students from historically underrepresented ethnic groups. The Foundation has made countless grants for research, demonstration, developmental, and evaluation activities to colleges and universities, individual researchers, and organizations which in turn make grants to institutions. As was noted earlier, there has been no published accounting of the Foundation's extensive activities during the past decade to improve transfer, and what follows is a selection of what appear to be some of the most important of them.

The Transfer Opportunities Program (TOP)

In September 1983, the Foundation awarded grants to 24 urban community colleges in 15 states with large percentages of Black and Latino students in their student bodies, to assist them in strengthening their academic and support programs so that

their students would be better prepared to move on to four-year institutions. Eight of the 24 grants that were awarded on a competitive basis were made to community colleges in California. The eight California colleges are Compton, Laney, Los Angeles City, Los Angeles Harbor, Los Angeles Mission, Sacramento City, San Diego City, and West Los Angeles. Several colleges with TOP grants were subsequently awarded additional grants by the Foundation over a period of years for various purposes related to specific campus needs and interests, among them Laney College for curriculum-related activities, Los Angeles Harbor College for a directory of potential transfer students for use in recruitment, and Los Angeles Mission and San Diego City Colleges for participation in a project to develop a student follow-up program.

The Foundation also funded the Academy for Educational Development and the Center for the Study of Community Colleges to conduct research on and evaluation of TOP, and *Networks* at Bronx Community College to facilitate communication and information about the TOP experience to colleges in the program and to higher education generally. A few publications that emanated from this funding are listed in the "References" at the end of this report (Cohen, 1988; Donovan, 1987). Like similarly funded programs, TOP has been difficult to evaluate in terms of numbers or increases in numbers of transfer students from underrepresented groups that they produced. The grants were small -- usually for a one-year period -- and usually had the primary effect of stimulating renewed interest and activity in transfer, particularly among staff in student services where most of the grant proposals were focused initially.

The Transfer/Articulation Program (TAP)

The Foundation made a grant to the United Negro College Fund initially in 1986 to make grants on a competitive basis to member institutions to work with public community colleges with large Black student populations to develop transfer and articulation agreements. An initial meeting of interested UNCF institutions and selected community colleges that had participated in the Ford Foundation's TOP was held to get acquainted and make plans to develop specific proposals for funding. The model for TAP was developed by the Harrisburg Area Community College in Pennsylvania in cooperation with Wil-

berforce University in Ohio in an effort to increase Black student enrollment at the community college. The major components of the proposals that have been funded during the three-year cycle of the Foundation grant are (1) articulation agreements that set forth the conditions that each pair of institutions is expected to meet in facilitating student transfer, (2) faculty exchanges, and (3) plans and timetables for student transition to the four-year institutions. Although not all UNCF institutions are located in the south, many in TAP are cooperating with community colleges in northern states that are some distance away -- for example, Cuyahoga Community College in Ohio.

California community colleges were not invited to participate during the first two years of funding because of their distance from the four-year institutions receiving the grants. However, the Peralta Community College District colleges have now been included and are working with Clark College/Atlanta University and Morris Brown College in Atlanta, with some students expected to transfer this fall.

The program is being evaluated by an external consultant from North Carolina State University which is not, of course, part of TAP. As might be expected, students have not been able to transfer as soon after the start of the program as had been hoped, and considerable time during the first year or more of the project has been spent in campus visitations by faculty and staff and work on lower-division course articulation agreements. In any case, enthusiasm for the program remains high on the part of both the community colleges and their Black students who want to have the experience of enrolling in an historically Black institution, and the Black colleges that are trying to maintain their enrollments.

Minority Student Achievement Project

The Ford Foundation made a grant to the State Higher Education Executive Officers (SHEEO) association in 1988 to conduct a competition for grants to state agencies for higher education planning and coordination for the general purpose of improving minority student baccalaureate-degree achievement, with an emphasis on coalition-building efforts. Objectives that the proposals were asked to

address include strengthening the transfer function and developing or improving accountability.

Appendix C describes six grants that were made to accomplish a number of objectives related to the overall purpose of improving minority student achievement. A grant to the Arizona Board of Regents will fund a Minority Education Access and Achievement Cooperative involving the public school sector as well as the community colleges and state universities in developing a comprehensive state plan and seeking funds for pilot projects that follow from the plan. The Colorado Commission on Higher Education, on the other hand, will use the grant to make better utilization of systemwide data bases to track students, ensure policy implementation, monitor the system's performance, and develop fiscal incentives to improve institutional performance. The grant to the Illinois Board of Higher Education will focus more narrowly on the transfer function so as to develop evaluative mechanisms that will be useful in policy formulation and resource allocation.

Transfer and teacher education is the major focus of the grants to the Massachusetts Board of Regents of Higher Education and the New York State Education Department, with the goal of increasing the number of transfer students from underrepresented ethnic groups who prepare for and go into teaching. Finally, the Ohio Board of Regents received its grant to develop urban demonstration programs to strengthen the transfer function of two-year colleges in seven metropolitan areas.

These and the other projects funded under the grant are now making progress reports to SHEEO and will meet in Texas in October 1990 to share their findings.

The National Center for Academic Achievement and Transfer

During the past year, the Ford Foundation made a multi-year grant to the American Council on Education to establish The National Center for Academic Achievement and Transfer for the purpose of examining, strengthening, and enhancing student transfer between two- and four-year institutions. It will concentrate on curriculum, teaching, and learning issues in an effort to increase transfer rates while ensuring a successful two-year college

experience and an opportunity for advancement to the baccalaureate degree. The Council sees the Center as a key player in its continuing efforts to achieve equity for underrepresented ethnic groups in higher education in this country

The Center has begun by awarding grants of \$25,000 to 25 pairs of community colleges and four-year institutions that are now serving significant numbers of historically underrepresented and other disadvantaged students, to be used to modify academic offerings or classroom practices to improve transfer. The University of California, Los Angeles, and Los Angeles Southwest College are one such pair to receive a grant that will also involve the new University Center for the Study of Urban Poverty. Grants have also been made to Southwestern College and San Diego State University that will emphasize liberal arts disciplines and review and assess academic practices in history, philosophy, English/literature, and foreign languages, and to Laney College, Merritt College, Holy Names College of Oakland, and San Francisco State University for a consortium to improve the academic achievement of students from historically underrepresented groups, with emphasis on mathematics and science skills. A second phase of the program will provide a small number of grants of up to \$250,000 to develop a core curriculum to meet the general education or liberal arts needs of transfer institutions.

The Center also plans to (1) develop a national poli-

cy statement on the importance of transfer in providing opportunities for low-income and underrepresented ethnic group students, (2) publish a series of working papers on transfer and articulation issues, (3) explore ways to strengthen research on transfer, and (4) establish an agenda for the higher education community to work together to influence legislation on these matters.

The Center for the Study of Community Colleges

The Ford Foundation has also been instrumental in providing support to the Center for the Study of Community Colleges -- a non-profit organization with close ties to, but independent of the University of California, Los Angeles, and the federally funded ERIC Clearinghouse for Junior Colleges. The Foundation has made grants to the Center for significant research related to the Urban Community College Transfer Opportunities Program and, most recently, to support a national Transfer Assembly on transfer data and definitions, a primary objective of which is to attempt to secure consensus about elements to go into the computation of state and national transfer rates. The Center was founded in 1972 and has conducted national studies with grants from the National Endowment for the Humanities, the National Science Foundation, the Andrew W. Mellon Foundation, and the Carnegie Foundation for the Advancement of Teaching, as well as the Ford Foundation.

5 *California's Special Efforts to Increase Transfer and Improve Articulation*

COGNIZANT of the decreasing numbers of community college students who have been transferring to the University of California and the California State University since the mid-1970s, California's Governor and Legislature have provided funding for several pilot programs that are designed to reverse this trend, increase the number of transfer students from underrepresented ethnic groups, and reduce articulation problems for those who do in fact transfer. In addition, segments and campuses have used their own resources -- that is, funds not specifically appropriated for special projects -- to undertake special programs and services to improve transfer.

Evaluation is very much a part of most of these specially funded efforts that remain in various stages of implementation. Demonstrable results in terms of increased numbers of transfer students are slow to appear since the transfer process itself is slow -- involving early identification of potential transfer students, followed by their recruitment and advisement, progress through the community college that usually includes some remediation of basic skills and exploration of educational and career interests, and finally transition to a four-year institution. Numbers of transfer students -- or rates, if it were possible to obtain a credible denominator -- are the most acceptable measure of the success of special programs. Progress in course and program articulation that increases persistence after transfer and reduces the time to the baccalaureate degree is more difficult to quantify but is scarcely less important than simply increasing the numbers who transfer.

This section discusses California's recent special efforts to increase transfer and improve articulation in two categories -- those that are specially funded by the Legislature from the State General Fund and those that are being supported from non-categorical funds appropriated to the segments. The latter discussion is selective because of the multiplicity of ef-

forts that are being made by all segments, often without special evaluation.

Each project or program is described briefly in regard to its main objectives, history, scope, and evaluation to date. Reference is made to unpublished sources of information about each, as well as published reports.

Specially funded projects

The State has funded five special pilot projects to increase transfer and improve articulation, all of them instituted after the downward trend in transfer a little more than a decade ago. They are -- in the order in which they will be described -- Transfer Centers, California Articulation Number System (CAN), Articulated Career Education (2+2+2), Articulation System Stimulating Interinstitutional Student Transfer (ASSIST), and Puente.

The Transfer Centers project

The State has funded the University and the State University to provide staff support to the transfer centers on community college campuses, but primary attention focuses on the latter institutions in this report because the centers are most appropriate conceptually to the institution where potential transfer students are being identified and given assistance prior to transfer. Establishment of and State funding for transfer centers was supported in a Commission report (1985) that called for community colleges to designate a central location on campus where transfer and articulation information and services might be readily available to students, counselors, faculty, and staff, and to which personnel from four-year institutions might come as well to work with potential transfer students and to give and receive information about articulation.

Transfer centers were not entirely new to the community colleges when a proposal was first made by the segments in 1984 for categorical funding for this activity. Some colleges and districts had already recognized the need for some centralization of transfer services and had created and staffed centers without special funding. In any event, the Legislature first funded in the Budget Act of 1985 a pilot program that was based on an intersegmental transfer center plan, with implementation at 20 community colleges, 8 University, and 14 State University campuses. In addition, 13 independent colleges and universities participated in the program without State funding.

Community college transfer centers offer the following services:

- 1 Identify and encourage students from underrepresented ethnic groups to transfer,
- 2 Assist potential transfer students to prepare for upper-division work,
- 3 Assist transfer students in filling out applications for admission with advanced standing,
- 4 Monitor and support the progress of transfer students through referrals to student services,
- 5 Inform and motivate students, and
- 6 Involve faculty and staff in strengthening curriculum and articulation.

The project was originally funded as a pilot program but has been extended each year by the Governor and the Legislature while an evaluation of the project's effectiveness was taking place. The State provided a total of almost \$13.2 million during the three-year pilot period -- about 77 percent of which was appropriated to the community colleges. Appropriations were increased slightly for the current and immediately past fiscal years and the community colleges have an additional appropriation for 1990-91 that will enable them to establish additional centers and fund related activities to improve transfer.

The report of Berman Weiler Associates, *An Evaluation of the Transfer Center Pilot Program*, that was submitted to the Board of Governors in September 1989, concluded that the program was implemented successfully and increased transfer rates, particularly to the University of California. More specifically, the evaluation found that problems in imple-

mentation included (1) the need to coordinate the centers with existing student services at the community colleges; (2) multiple duties that were assigned to some center directors that detracted from their work at the centers, and (3) some lack of training and administrative experience on the part of directors. Top-level administrative support was also found to be essential at the campus level, with the center director reporting directly to senior administrators. Some additional findings (1) underscored the importance of faculty involvement, (2) noted the centers' contribution to articulation, and (3) called attention to the need for clear direction and oversight from State-level staff.

In regard to the programs in the University and the State University, the evaluation reported that all campuses had implemented the workshop and academic advising components of the program, but there were differences among the campuses in the degree of emphasis that was placed on outreach to Black and Latino students that were related to differences in the perceptions of campus administrators regarding the goals of the program.

Program effectiveness. Evaluators calculated transfer rates by dividing the number of students who transferred to the University or State University by the community college credit enrollment -- before and after the transfer center program was implemented, and for community colleges with and without State grants for transfer centers. The results suggest that the colleges with specially funded transfer centers experienced a significant improvement (30 percent) in transfer to the University of California with a slight improvement over other community colleges in transfers to the State University. However, the quantitative evidence does not allow cause-and-effect conclusions to be drawn from the standpoint of statistical analysis regarding differences or changes in rates.

Berman and Weiler made the following 11 recommendations:

- 1 Continue and expand the transfer center program at both community colleges and four-year institutions through appropriations from the State General Fund,
- 2 Phase in program expansion over a period of three to five years -- 15 to 30 additional community college sites each year,

- 3 Give underserved regions high priority in program expansion -- that is, in regions not well represented in the pilot program,
- 4 Maintain State oversight of the program at a level like that during the pilot project,
- 5 Increase funding for expansion of programs in the University and the State University in relation to the addition of programs at community college sites;
- 6 Incorporate successful components into the transfer center "model" -- for example, emphasis on individual approaches to the delivery of services and the place of center directors in the campus administrative structure,
- 7 Intensify efforts to serve underrepresented ethnic groups,
- 8 Develop strategies to serve students with low tendency to transfer -- for example, part-time and evening students,
9. Clarify expectations and accountability for four-year institutions,
- 10 Insure adequate staffing levels at four-year institutions, including a full-time coordinator, and
- 11 Encourage greater regional cooperation

California Articulation Number (CAN) System

The State-level office for CAN was first funded from the State General Fund in 1985 following the submission to the Legislature of a Commission report on the feasibility of a common course-numbering system for California's public postsecondary institutions (1984b). The report included an analysis of what other states were doing to establish such systems -- most notably Florida, where it had been in statute for some time -- and how they felt about the need and desirability of doing so. The analysis also took cognizance of a voluntary, regional system that institutions in the Sacramento area had begun to develop a few years earlier and recommended that funds be appropriated from the State General Fund through the regular segmental budget process, without recourse to a statute that would mandate the system.

CAN is a cross-referenced system to identify transferable lower-division courses that are commonly

taught at both community colleges and four-year institutions in California. It does not replace an institution's own course numbers but, instead, adds a common number that includes a discipline-related prefix and a one- or two-digit number for each course. The common number does not imply commonality of content or methodology but relates to subject-matter requirements -- that is, not necessarily "equivalency" but a community college course taken "in lieu of" a university course in order to meet a particular requirement.

The purposes of CAN are to.

- 1 Promote transfer by simplifying the identification of transferable courses and the specific disciplines and programs to which they are transferable,
- 2 Promote the development of common methods of course identification within each public segment where there is a clear intersegmental need, and
- 3 Help identify courses with comparable content so that common competencies can be expected.

As noted earlier, participation in CAN is voluntary on the part of institutions offering baccalaureate-level courses, and the system is administered by a small Sacramento-based staff that coordinates, facilitates, encourages, documents, and performs other tasks to keep the system alive and developing. A statewide coordinating committee is responsible for establishing direction and overall policy for CAN and for general coordination of the project.

CAN is essentially regional in nature in that two- and four-year institutions in regions are most likely to participate. In order to do so, a community college is expected to have faculty-approved articulation agreements with four public universities including at least one University and one State University campus. Campuses are classified as "reporting," "qualifying," or "participating," depending on their level of involvement and formal commitment to the system.

Although it is difficult to assess the scope and effectiveness of CAN, participants say that CAN has resulted in a heightened awareness of the importance of articulation and a substantial increase in articulation in the State. Also, CAN has been organizing intersegmental faculty meetings to develop course descriptors for CAN courses and this has promoted faculty-to-faculty understandings about course

competencies and rigor. A recent CAN staff report (May 1990) shows that 90 community colleges, 17 State University campuses, one University campus, and two independent institutions participated in the system as of June 1, 1990, and that over 4,500 courses "qualified" with CAN designations that were widely used. In spite of special funding to provide an incentive, the University faculty has been the most reluctant among the segments to participate at any level -- an action that is contingent upon local (campus) faculty approval.

The State University was the only segment to request additional funds for 1990-91 (\$207,000 in a Budget Change Proposal) but none were appropriated. The community colleges have been strong supporters of and active participants in CAN since they believe that they have the most to gain from such a system. In fact, some want to develop shared CAN numbers with four-year institutions well outside their regions. Total expenditures for CAN from year to year or overall are difficult to estimate because a good deal of faculty, staff, and travel expense is contributed by the segments and the participating campuses. Staff at the California State University, Sacramento, was funded and housed by that institution while CAN was being developed on a pilot basis -- before the Commission recommended State funding for its implementation.

Articulated Career Education Program (2+2+2)

The Legislature appropriated funds in the 1988-89 support budget for the Chancellor's Office of the California Community College to undertake a three-year pilot program to expand "2+2" career education programs to include the junior and senior years of high school and extend through the community college to the baccalaureate degree (2+2+2). The action was taken in part in response to a Commission report on the feasibility of such programs that the Legislature had received in December 1987. In recommending State support for such programs, the Commission recognized that the high school-community college portion had already been funded on a pilot basis with federal vocational education grants, but that such funds could not be used to extend programs to the baccalaureate level. The report also cited a large number of community college curricula in a wide range of career fields that were already articulated with State University pro-

grams in related fields, and suggested that these might also be articulated downward to ensure appropriate orientation and preparation at the high school level.

Eighteen projects were funded from the first-year appropriation of \$410,000 -- ten to extend high school-community college programs to the baccalaureate degree, seven to extend postsecondary articulated programs down to the high school level, and one to extend opportunity to "dropouts" who had already completed a vocational program whereby they could return to a community college for general education before transferring to complete a baccalaureate-degree program (the "upside-down" curriculum concept).

Project developers were encouraged to include regional occupational centers/programs and adult schools in their planning, as well as regular high schools, and the competition for funding was open to the University as well as the State University, although the University found the concept of articulated, undergraduate career education somewhat difficult to apply to its traditional curricula.

Projects were developed in the following career fields: nursing (4), business/accounting/computer science (4), automotive technology (3), management of manufacturing (2), early childhood education (2), electronics technology (2), agriculture (1), and administration of justice (1). Some projects included more than one career field.

Because of the timetable of the State budgeting process and the necessity to develop a formal Request For Proposals (RFP) for projects after the appropriated funds had become available, projects were not selected for funding until November 1988 -- five months into the budget year. Thus the first year was expected to be a planning year of only seven months duration but the projects began at different stages -- some with less well-developed articulation with high school programs than had been assumed in making the grants, and others much further along in completing the full sequence to the baccalaureate degree than might have been anticipated. Thus students were enrolled in some programs by Fall 1989 but not in others, and monitoring of student progress could not be done during the first year.

The Governor and the Legislature increased funding for the second year of the three-year program, to

a total of \$1,145,000. The increase made it possible to fund 10 additional projects in teacher education that are targeted specifically for students from historically underrepresented groups. An advisory committee from both campuses and the central administration of each of the segments has helped guide the work of staff in the Chancellor's Office throughout the project and met again in July to review proposals for a continuation of funding in 1990-91.

Evaluation The first year of the program was evaluated by the Rancho Santiago Research Center under contract with the Chancellor's Office (January 1990). The purpose of the evaluation was to examine first-year operations and implementation, and the extent to which the projects met their objectives. The evaluation included the solicitation of annual reports from the projects, as well as site visits by Center staff and attendance at project directors' and advisory committee meetings.

Evaluators reached the following seven conclusions:

1. The primary focus was on curriculum articulation during the first year, and most project objectives were achieved.
2. The expanded communication among faculty, counselors, and administrators that occurred in connection with the projects was beneficial.
3. Outreach activities need to receive additional attention.
4. The original 2+2 programs that were to provide the basis for expansion to 2+2+2 required additional work that was not fully anticipated.
5. Student tracking will require extensive cooperative efforts and sophisticated data management by the projects.
6. Articulation activities between high schools and community colleges are more frequent and advanced than those involving four-year institutions and community colleges.
7. Projects were in need of continuing guidance and technical assistance in their developmental stage, and the sharing that occurred among participants needs to continue.

Project ASSIST

The Articulation System Stimulating Interinstitutional Student Transfer (ASSIST) is a microcomputer-based articulation and transfer system that was developed by staff at the University of California, Irvine, with the cooperation of staff at Los Angeles Harbor College. Its potential for providing direct assistance to community college students planning to transfer was recognized during the course of a federally funded project to improve articulation that was conducted by the Western Interstate Commission for Higher Education in the early 1980s. In March 1985, the Commission recommended that ASSIST be evaluated in terms of its effectiveness as a supplement to individual counseling about transfer and, if found to be effective, expanded to other campuses. Although no formal evaluation followed immediately from this recommendation -- in part because of delays in making the system operational -- funds were appropriated in 1986 for a pilot project that is still under way.

ASSIST was evaluated in 1988 by John W. Evans with funds that the segments provided for this purpose. Although the evaluation identified several problems, there was a recommendation for continuation and expansion to additional sites.

ASSIST was created to combat the problem of students' limited access to or ineffective use of institutional information in planning to transfer -- particularly the applicability of community college courses to meet university requirements. The system can provide students and their counselors or academic advisors specific information about the transferability of community college courses to academic programs in any participating four-year institution and permits them to assess the students' progress toward satisfaction of degree requirements at any such institution. It also identifies community college courses that can be taken in lieu of university requirements. Finally, the system contains general campus information to help transfer students plan and make choices -- information about deadlines, financial aid, majors, and the like.

At present all University campuses, 10 State University campuses, and 21 community colleges are

participating in ASSIST with State support available on a regional basis for technical assistance

Puente

The Puente project is a statewide program that now functions on 25 community college campuses with the dual objective of reducing the number of drop-outs among Mexican American/Latino students and increasing the number who transfer to complete a baccalaureate degree. Few Mexican American/Latino community college students transfer, but 40 percent of the Puente students who completed the program through 1986 have transferred to a four-year college or university. The program began at Chabot College in 1982 and has enrolled more than 2,000 community college students since that time. Funded first through the Bay Area Writing Project, the State appropriated support through the University and the Community College Chancellor's Office budgets beginning in 1987, with additional funds raised in the private sector. The University and the Community Colleges have been cosponsors since July 1985, with the University acting as host and fiduciary agent for the program.

Puente trains English teachers and Mexican American counselors as a team to conduct one-year writing/counseling/mentoring programs on community college campuses. More than 900 professionals from the Mexican American/Latino community serve as Puente mentors. Students and mentors are paired so as to take into account career and personal interests. Puente students take an accelerated writing program consisting of two courses -- a one-term developmental writing course followed by a transfer-level English composition course, remaining with the same teacher for the entire year. The program uses group work to develop fluency and alleviate writing anxiety, and emphasizes content over grammatical correctness at first. Puente students meet regularly with their counselors who monitor their academic progress and help them make career and educational plans, and with their mentors who also serve as role models.

A California Community College Budget Change Proposal provides an additional \$50,000 for staffing for the statewide program in 1990-91.

Other special efforts to strengthen transfer

Many additional efforts are being made to increase the flow of transfer students and improve articulation that receive no line-item funding in the State Budget. It is not feasible to compile an exhaustive list or to describe all of the major efforts -- if, in fact, staff could document all of them. Instead, attention is called to a few that have potential impact.

The general education transfer curriculum

For several years, the community colleges urged the development of a common core general education curriculum that would enable transfer students to satisfy the lower-division breadth requirements of both the University and the State University. The problem has been differing requirements among the University campuses and among schools and colleges on particular campuses as well. In 1988, Assembly Bill 1725 -- the California Community College "reform act" -- required the three segments to develop and adopt a general education transfer curriculum.

The Intersegmental Committee of the Academic Senates of the University, the State University, and Community Colleges has spent more than two full years of study and consultation to develop a curriculum that would meet with the approval of the parent senates -- particularly those of the universities, with a package that was to include fewer than 40 semester units of a 60+ unit program. The core curriculum is viewed as one option that permits students to meet all lower-division general education requirements, while leaving open the option of pursuing the requirements mandated by a specific campus available to those who wish to do so.

The Academic Senate of the Community Colleges approved the proposed curriculum in April 1989 with the following distribution of courses that now total 34 to 37 semester units: English communication, 9 units; mathematics/quantitative reasoning, 3 units; arts and humanities, 9 units; social and behavioral sciences, 9 units; physical and biological sciences, 7 to 9 units; language other than English proficiency equivalent to two years of high school study. The last action by the Senates to approve the curriculum was taken on May 4, 1990, but implementation cannot be expected before Fall 1991 be-

cause of the need to develop procedures to approve and certify courses and to secure ratification by appropriate bodies.

Transfer Admission Agreements (TAA)

The University of California, Davis, has pioneered an effort within the University system to develop special Transfer Admission Agreements with community colleges seeking them -- beginning with the colleges in the Los Rios Community College District and now extended to 40 campuses in all parts of the state and covering 19.5 percent of the transfer applicants who were admitted last fall. The TAA is available in all majors that the Davis campus offers.

A TAA is a formal, written agreement that outlines the courses a student must take before transferring, states the grade-point average he or she must earn, and lists specific requirements for limited-access majors. After a TAA is written, the student signs the agreement, along with his or her counselor and a Davis campus representative. These signatures guarantee that the student will be admitted to Davis in the major and for the term of choice, if he or she lives up to the agreement and applies for admission during the open filing period. A TAA may be written after the student has completed approximately 30 semester units of transferable credit or up to one year before he or she transfers.

The TAA is but one option that is available to students who wish to transfer -- in this case to the Davis campus. It is unlikely to be useful to the large numbers of transfer students who attend two or more community colleges or some combination of community colleges and four-year institutions for their lower-division work, or for those who change their major or the campus to which they want to transfer after they sign an agreement. TAAs appear to be most useful to community college students who know what they want to do and are capable of doing it when or soon after they enroll in a community college. The rate of enrollment of what the University calls "Student Affirmative Action" applicants was low in Fall 1989 -- 56.6 percent, compared with 71.2 percent of all TAA applicants -- and the actual number of the former was 30, compared with an overall total of 321 TAA applicants who were admitted and enrolled. The TAA appears to be yet another tool that is useful in strengthening

transfer but will not alone solve all of the problems that students encounter in trying to transfer.

Appendix A displays the most recent University description of such programs for each campus and many majors. It is reproduced from the University publication, *Answers for Transfers, 1991-1992*.

The Office of the Chancellor of the State University is unable to provide precise information at this time about the extent to which its campuses have developed transfer admission agreements with specific community colleges, noting that additional agreements are in the process of being developed and there are differences in how campuses are defining transfer agreements. In a letter dated August 1, 1990, staff wrote:

Most California State University campuses have developed transfer admission agreements with regional community colleges. These agreements specify courses needed to meet transfer admission requirements as well as courses needed to fulfill major and general education requirements. The agreements generally state that students completing the specified requirements will be admitted to programs that are not impacted. Thus, the agreements provide potential transfers with a valuable written transfer planning guide.

Discipline-based articulation

A different kind of activity that the community colleges have undertaken in partnership with the State University is the Joint Faculty Projects. These began with a joint conference in 1987 involving faculty in English and mathematics from the two segments. The focus was on ways to improve preparation and articulation in these two disciplines. Since the conference, 18 regional joint faculty projects which address articulation, assessment, and competencies in English and mathematics have been jointly funded. A second joint faculty CCC/CSU conference on critical thinking was held in April 1990.

The Transfer Alliance Program (TAP)

The Center for Academic Interinstitutional Programs at the University of California, Los Angeles, initiated the Transfer Alliance Program (TAP) in

1985 in conjunction with the College of Letters and Science and the Office of Undergraduate Admissions and Relations with Schools as a means of strengthening the transfer function and the role of faculty in transfer in selected community colleges in the Los Angeles area, most of which enroll large numbers of students from underrepresented ethnic groups. The specific goals of TAP are

- 1 Stronger student academic preparation and curriculum planning,
- 2 Focus on achieving the baccalaureate degree after transfer,
- 3 Increased achievement of academic skills needed for success in the major; and
- 4 Faculty participation in all of the above (Ackermann, 1989)

TAP attempts to publicize the community college as a viable route to a baccalaureate degree, with a "Community College Option Letter" sent to all applicants who are not admitted to UCLA as freshmen, to inform them that they are guaranteed priority admission to the College of Letters and Science upon completion of TAP at a participating community college. While enrolled in the latter, students are provided meaningful linkages with UCLA that familiarize them with campus facilities and services. Expectations of commitment are clearly set forth for both UCLA and those community colleges that wish to participate in the program. These include a formal structure of an administrative, faculty, and student services liaison.

Although the program is still new in terms of student recruitment and progress through the community colleges, 84 TAP students transferred to UCLA as juniors in the Fall 1988 term, 57 percent of whom were White and 21 percent of whom were Asian. Almost all had an entering grade-point average of at least 2.8, and 60 percent earned a UCLA grade-point average of 2.8 or better in the first term after transfer. Only one TAP student left UCLA before the start of the winter term after entrance and two left during or after that term. (According to the program's director, 165 new TAP students enrolled in the Fall 1989 term -- almost twice as many as the previous year, and 174 had been admitted by June for the Fall 1990 term.)

TAP students transferred from 11 of the 12 Los Angeles-area community colleges with TAP in Fall

1988, with the largest number (37 percent) from Santa Monica College. The ethnic distribution of the TAP students is very similar to the group of 395 non-TAP students who transferred from these same colleges but the TAP group has a larger proportion of women (67 percent) than the non-TAP group (54 percent). Although students were guaranteed admission to the College of Letters and Science, three enrolled in the School of Engineering and eight in the School of Fine Arts.

Staff at the Center has now designed a longitudinal analysis of TAP that will identify factors affecting the success of students transferring from two- to four-year institutions. The sample will consist of students who planned to transfer to four-year institutions in the Fall 1989 term.

Special programs for underrepresented students

In December 1989, the Chancellor's Office for the Community Colleges published a comprehensive report of a study of *Programs and Practices that Facilitate the Transfer of Underrepresented Ethnic Minority Students* that had been prepared for the Transfer and Articulation Committee of the Intersegmental Coordinating Council. The purpose of the study was to develop an inventory of such programs, describe the characteristics and activities that contribute to their success, and provide information that could be used to replicate successful programs.

The study found that while a majority of the California Community Colleges have programs such as transfer centers and EOPS that include components designed to improve transfer for students from underrepresented groups, fewer have programs with the *specific* purpose of facilitating the transfer of such students. (Puente is an important exception to this finding.) It concluded that while the community colleges have initiated many efforts in this area, most programs and practices are new, unproven, and in need of consistency, coordination, and evaluation.

Community College Fund for Instructional Improvement

In 1977, Assembly Bill 1173 established the Fund for Instructional Improvement that enables the

Chancellor's Office for the California Community Colleges to make grants and loans to districts and campuses from specially appropriated funds each year to improve teaching and learning in these institutions through the development, implementation, and evaluation of alternative educational programs and services. Originally, the program focused largely on curriculum development but in 1986, the Board of Governors authorized the use of a portion of the funds to address statewide concerns that were broader in scope than curriculum matters. The Board's Annual Basic Agenda sets forth its statewide concerns and priorities, one of which is transfer education -- for example, efforts to (1) increase the number and success of transfer students from historically underrepresented groups, (2) define a general education transfer curriculum, and (3) extend 2+2+2 articulation to academic disciplines.

A review of the projects for which grants have been made since 1979 shows a total of 26 that have the improvement of transfer and articulation as part of their purpose and scope, for a total of more than \$450,000. Both the number of grants in this general area and the size of the individual grants have been increasing since 1986. The grants range in size from \$2,250 for an interdisciplinary core curriculum for transfer in 1979 to \$64,154 for an "Achievement in Science, Engineering, and Technology (ASET)" project in 1990.

The largest number of projects (14) focus at least in part on the improvement of transfer for women and historically underrepresented ethnic groups. Some of these also have a curriculum focus. In all, 11 address some curriculum area: four deal with a core transfer curriculum, including two that emphasize the humanities, four focus on science, engineering, mathematics, and technology, two are in the area of natural resources, including agriculture, and one focuses on writing. Finally, two projects deal with transfer issues that are related to the offering of honors courses, one funds a Joint Projects faculty program involving the State University, and one is very general in its objectives relating to articulation.

Thus while the Fund for Instructional Improvement has few legislative restrictions that would limit grants to improve transfer and articulation, relatively few grants have been made for this purpose since the Fund was established 12 years ago. Infor-

mation is not available to assess the extent to which this reflects either the level of interest of the applicants for grants or the worthiness of the proposals.

Other State University activities

Outreach to underrepresented students

The State University has implemented a new approach to identifying underrepresented community college students and encouraging them to transfer to a four-year institution. This program provides trained student interns from State University campuses to work with community college students in vocational and career-ladder programs, with particular emphasis on students from historically underrepresented ethnic and low-income groups, and older part-time students. The Chancellor's Office has allocated \$750,000 to 17 State University campuses for this program. The 64 participating community colleges are designated on the basis of enrolling at least 1,600 students from underrepresented ethnic groups. The purpose of the program is to identify community college students with the potential to pursue the baccalaureate degree, but who have not indicated that they intend to transfer.

Special efforts are made to employ State University students from underrepresented groups who transferred from the same community colleges as the perspective students they are counseling, on the assumption that the recency and commonality of their experience will enhance their effectiveness. The program also requires that State University faculty and administrators work closely with their counterparts in the community colleges to identify the vocational programs to be included, identify the students who will be encouraged to transfer, and develop any particular articulation of academic programs that may be required.

Campuses, in consultation with community colleges, determine the disciplines to be involved in the project. The disciplines most commonly identified for inclusion are administration of justice, architecture, business administration, child development, computer science, engineering, family/consumer studies, graphics, health sciences, industrial technology, nursing, and physical therapy.

Funded projects include:

<i>State University Campuses</i>	<i>Community Colleges</i>
Bakersfield	Bakersfield
Dominguez Hills	Compton El Camino Los Angeles Harbor Los Angeles Southwest
Fresno	Fresno College of the Sequoias
Fullerton	Cerritos Fullerton Orange Coast Rancho Santiago
Hayward	Alameda Chabot Contra Costa Laney Merritt
Long Beach	Long Beach Rio Hondo
Los Angeles	East Los Angeles Glendale Los Angeles City Pasadena Los Angeles Trade Tech
Northridge	Los Angeles Mission Los Angeles Pierce Los Angeles Valley Oxnard Santa Monica Ventura
Pomona	Chaffey Citrus Mt. San Antonio
Sacramento	American River Sacramento City
San Bernardino	College of the Desert Riverside City San Bernardino Valley
San Diego	San Diego City San Diego Mesa Palomar
San Francisco	Cañada San Francisco City San Francisco Center
San Jose	De Anza Evergreen Hartnell Mission San Jose City
San Luis Obispo	Allan Hancock Santa Barbara
Sonoma	Santa Rosa Solano
Stanislaus	Modesto San Joaquin Delta

Other initiatives

Appendix B displays a matrix of initiatives that have been suggested by faculty and staff or emanate from recommendations in *The Master Plan Renewed* to improve transfer and articulation in these two segments, reproduced from the California State University Agenda Item 1 of the January 10-11, 1989, meeting of the Trustees' Committee on Educational Policy

Intersegmental Coordinating Council (ICC)

The Transfer and Articulation Committee is one of four clusters that reports to the ICC and advises it concerning issues and priorities that it and its parent Education Round Table should address. Other clusters that also deal with some aspects of articulation and transfer are the Outreach and Preparation and Curriculum and Assessment Cluster Coordinating Committees. Since its establishment in 1987, the Transfer and Articulation Committee has been working to achieve the following objectives (Intersegmental Coordinating Council, October, 1988).

- 1 Students, parents, school personnel and the public should receive timely, accurate, comprehensible information necessary for effective transfer
- 2 Services needed to facilitate transfer and encourage retention, such as academic and career advising, financial aid and mentoring, should be adequately provided by each institution.
- 3 Academic preparation and student support services should be the joint responsibility of faculty and student services personnel so that faculty have a clear working knowledge of articulation and counselors can contribute to strengthening the curriculum to assure students' academic competencies
4. Courses and programs should be fully articulated across the state, with articulation agreements accessible to all students, faculty, student support staff and parents
- 5 The knowledge and skills necessary to suc-

ceed at each academic level should be clearly communicated as a part of the articulation process so that students are prepared for the next level and so that diagnostic and remedial measures can be effectively applied.

- 6 Opportunities should be provided for exchange of information and dialogue among administrators and faculty from all segments in order to increase the levels of consciousness about barriers to transfer and special needs of underrepresented groups and to work towards ensuring smooth student progress through the educational system
- 7 More complete data should be developed on transfer and on student progress in order to help the segments better understand the factors which enhance or detract from the successful transition from one institution to another.

Among its many, varied activities, the Committee has promoted the further development of CAN and ASSIST, conducted statewide and regional conferences for counselors and others, and developed a statement of articulation principles that addresses the roles and responsibilities of segments, institutions, and various types of personnel who should be involved in transfer and articulation

The Committee has been working through two subcommittees. The Data Needs subcommittee is concerned with (1) defining data elements and transfer rates, and (2) identifying pools of potential transfer students. The Minority Transfer Issues subcommittee is concerned with (1) identifying new cohorts of potential transfer students, (2) connecting the University's and State University's precollegiate outreach programs with community college efforts in this area, and (3) facilitating the transfer of underrepresented students by identifying and promoting successful intersegmental strategies

Finally, the Committee has overseen the publication of a directory of transfer and articulation personnel, a handbook of articulation policies and procedures, and the results of a survey of community college programs to encourage transfer on the part of historically underrepresented groups. The Committee also prepares an annual report of its activi-

ties and accomplishments, together with a yearly plan of work for approval by the ICC

Among the activities that the Committee has proposed for 1990-91 are (1) a review of the data on transfer by Black and Latino students from individual community colleges to specific university campuses, (2) the development of linkages to assist students in early cooperative outreach programs who attend a community college to subsequently transfer, and (3) the compilation of information about the articulation of ESL courses between community colleges and four-year institutions

Efforts to compute a transfer rate

Among the many issues facing those who are involved in transfer today is that of definition and measurement of a transfer rate. The controversy arises from the publication of rates that have been computed independently and range from less than 5 to more than 40 percent because data elements have been defined differently by different analysts.

The impetus for finding a way to compute a credible, reliable rate comes in part from the national level -- officials in the U.S. Department of Education who seek higher education outcome measures and researchers who use information from national, longitudinal data bases to compute national rates. Community college leaders at the state and local levels are now becoming involved -- in part in self-defense against critics who compute rates for their colleges that the leaders find unacceptable

The problem with transfer rates may be outlined in the following sequence of issues:

- 1 There is as yet no consensus about the definition of data elements that should be used in computing a rate -- the numerator being the number of community college students who transferred and the more controversial denominator being the pool of potential transfer students -- however defined
- 2 Assuming that consensus is reached regarding definitions and that data are available, the resulting rates may be used to make comparisons between states, districts within states, and community colleges within districts -- most of the

comparisons being subject to criticism because of quite different community college missions, priorities, student populations, and access to baccalaureate education

3. There will be pressure to analyze rates historically for states, districts, and colleges -- not an easy task since student data may not be available as defined in the agreed-upon computation of rates
4. The focus on the rate ignores other aspects of a successful transfer function, since the *rate* might go down at the same time that the *number* of successful transfers goes up for reasons unrelated to the viability of the transfer function itself

Finally, increases over time in *numbers* of community college students who transfer and complete baccalaureate degrees -- particularly students from underrepresented ethnic groups -- are probably a more important measure of success than changes in rates, and resources that will be needed to obtain new types of data for the computation of rates might better be used to expand efforts to produce successful transfer programs and processes

Many efforts to define and compute transfer rates are under way at this time and attention is called to two -- the work of Arthur Cohen and his associates at the Center for the Study of Community Colleges and that of Berman-Weiler Associates with the National Effective Transfer Consortium. They are national in character and involve growing numbers of California Community Colleges. Neither effort is supported by major federal or foundation funding.

The Transfer Assembly

In March 1990, the Center for the Study of Community Colleges convened the first invitational Transfer Assembly on the theme, "Data and Definitions," to discuss issues related to definitions and data collection for the computation of transfer rates at state and local levels. Representatives from 48 two-year institutions that had been working with the Center on this project participated in the Assembly, together with staff from state agencies for higher education, a federal official, and interested parties from four-year institutions. Proposals for computing a rate were made and data were presented, and the following definition is now being proposed for use by Assembly participants

All students entering in a given year who have no prior college experience, who complete at least twelve degree-credit units at the college, and who subsequently enroll at a senior institution (Cohen, 1990)

Using this definition and data from 47 institutions in 16 states, Cohen found that nearly 50 percent of the community college students met the first and second parts of the definition (no prior college and earned 12 or more units) and of that group, 23 percent had taken classes in a university.

The proposal does not appear to be suited to California for many reasons, chief among them being that (1) students enroll for many purposes other than transfer and are often in the same courses and programs as those with a clear intent to transfer, and (2) most students are required to take at least 54 semester units of college credit before being considered for admission with advanced standing.

National Effective Transfer Consortium

Berman-Weiler Associates, a consulting firm that is located in Berkeley and has been involved in numerous projects with California colleges and universities, provides research and other services to the National Effective Transfer Consortium with founding membership from 15 California Community Colleges and 14 others from 12 states. The Consortium's stated purpose is to enhance the colleges' capability to transfer students to four-year institutions. One of Berman-Weiler Associates' major roles is to establish a data base that would enable valid comparisons to be made among Consortium colleges.

In its first-year report, *Enhancing Transfer Effectiveness. A Model for the 1990s* (Berman-Weiler Associates, 1990) major attention is given to defining a new transfer rate and discussing expected rates in the context of evaluating the effectiveness of the transfer function. The authors reject a definition that uses total credit enrollment in the community colleges as the denominator and produces a transfer rate of about 5 percent for Consortium colleges. Instead, they propose a rate that uses "number of leavers" as the denominator -- that is, number of non-reenrolling students from one term to the next in a community college. A refinement of this simple definition excludes students who already have a

baccalaureate degree or are concurrently enrolled in or on leave from a four-year institution, as well as those who earned fewer than six college credits in community colleges -- that is, "leavers" with the least likelihood of transferring. Using this new definition, Consortium members were found to have an average rate of about 25 percent.

The authors also discuss whether (1) there is a transfer rate that a particular college should be expected to attain and (2) all colleges should be expected to attain the same rate -- "yes" to the first and "no" to the second part of the question. They conclude that external factors largely beyond a college's control determine a range within which a college's transfer rate can be expected to lie -- among them, mission, student and community demographics, proximity to four-year institutions, and local economic conditions, or a total of 10 factors in all. They continue by pointing out that there is a high

correlation between the colleges' percentage of students who are full-time enrollees and their transfer rate, and that the former may thus be used as a proxy for the external factors in computing an "expected transfer rate." Effectiveness is then assessed in terms of a college's transfer rate being above or below its expected rate.

Berman and Weiler distinguish among four types of student leavers in their analysis: (1) those who expect to transfer and do so, (2) those who expect to transfer but do not do so, (3) those not expected to transfer and do so, and (4) those not expected to transfer and do not do so. From this typology they propose the following definition of transfer effectiveness: Type 1 + Type 3 students divided by Type 1 + Type 2 students. Using this definition, Consortium colleges have an average rate of effectiveness of 66 percent -- with one of the 25 over 100 percent and three less than 40 percent.

Appendix A

University of California Transfer Admission Programs

NOTE The following material is excerpted from pp 13-17 of *Answers for Transfers, University of California, 1991-1992* (Berkeley University of California, 1990)

The University of California campuses offer a variety of programs in support of transfer admission, particularly for community college students. Under some programs, students at certain community colleges are guaranteed admission to a University of California campus if they meet specific requirements. Other programs provide extensive academic and admission support services to transfer applicants, but do not guarantee admission. These programs are described below by campus.

BERKELEY

Cooperative Admission Program (CAP)

The Cooperative Admissions Program (CAP) gives students the opportunity to combine lower-division study at a community college with a guarantee of admission to Berkeley as a junior. The program is specifically for students who apply to Berkeley for freshman admission, are UC eligible (meet the minimum admission requirements for freshmen), but are not admitted as freshmen. Four colleges at Berkeley participate in CAP -- Letters and Science, Environmental Design, Engineering, and Natural Resources. Each college has specific requirements, described below, for students who wish to be admitted through CAP.

College of Letters and Science All UC eligible freshman applicants to the College of Letters and Science who are not admitted may gain admission to the College through CAP if they meet the following requirements while attending a participating community college. Students must complete a minimum of 56 semester units -- including the College's basic

breadth requirements (foreign language, quantitative reasoning, and reading and composition) or the Transfer Core Curriculum, and prerequisites in the major, if appropriate -- and earn a GPA of at least 2.4. Admission is guaranteed only to majors which are not impacted.

College of Environmental Design The faculty of the College of Environmental Design select the freshman applicants who are offered the CAP option. Students must complete a minimum of 56 semester units with a GPA of at least 3.0. Courses completed must include prerequisites for the intended major.

College of Engineering The CAP option is available only to select freshman applicants to the Electrical Engineering/Computer Science program. Students must complete a minimum of 56 semester units, including the lower-division prerequisites, and earn a GPA of at least 3.5.

College of Natural Resources All UC eligible freshman applicants to the College who are not admitted will be eligible to participate. Students will be required to complete a minimum of 56 semester units and earn a GPA of at least 2.4.

DAVIS

Transfer Opportunity Program (TOP)

The Transfer Opportunity Program (TOP) encourages community college students to transfer to UC Davis and provides support services to ease their transition. The cornerstone of the program is the TOP transfer advisor who regularly visits each of the participating community colleges to work with counselors and students.

The TOP advisor provides information about admission and transfer requirements, academic programs, financial aid, housing, tutoring, campus life, and other services and programs. The advisor evaluates student transcripts to assure that admission re-

quirements are met and the community college courses taken are transferable to the University. The TOP adviser also works with counselors and students to develop individual transfer admission agreements. Students who comply with the specifications of their agreement are guaranteed admission one year in advance in all majors.

Transfer Admission Agreements

Students at several other community colleges may also develop transfer admission agreements with UC Davis, even though the colleges do not participate in TOP. With the assistance of their community college counselor, students draft an agreement for review by a UC Davis Admissions representative. The agreement lists the courses the student will complete at community college -- with emphasis on courses required for admission, major prerequisites, and breadth requirements. Students who comply with the agreements are guaranteed admission in advance in all majors.

IRVINE

Zero In On Transferring (ZOT!)

Zero in on Transferring (ZOT) is UC Irvine's transfer admission assurance program for junior level transfers from participating community colleges. Students are eligible for ZOT! if they complete 24 transferable semester units with a specified GPA. Students may enter the program as early as 18 months before they wish to enroll at UCI.

ZOT! students develop admission assurance agreements with the help of UCI Admissions officers. The agreements list the specific courses the student must take to gain admission. ZOT! students receive personalized guidance to help them meet admission requirements, breadth requirements, and major prerequisites -- all included in the guaranteed admission agreements.

LOS ANGELES

Transfer Alliance Program (TAP)

The Transfer Alliance Program (TAP) encourages students to transfer to UCLA as juniors after com-

pleting a rigorous academic program at a participating community college. Students who complete the program are given priority consideration for admission to the College of Letters and Science (except for the Communication Studies major). In fall 1989, 98 percent of TAP applicants were admitted, the few who were denied admission had applied to impacted majors in the School of Engineering and Applied Science or the College of Fine Arts.

TAP community colleges offer a core of enriched courses to meet general education requirements as well as prerequisites for majors in the College of Letters and Science. Special services for TAP students include meetings with UCLA admissions representatives, counselors, faculty, and former students, college library cards, and participation in college cultural and sports events.

Community College Transfer Program

This program provides assistance to prospective community college transfer students, with particular emphasis on underrepresented students. Program staff visit participating community colleges several times a month, providing preadmission evaluations, admission counseling, and workshops on a variety of topics such as choosing a major, financial aid, EOP/AAP and other support services, test-taking tips, and study skills. Program staff keep transfer applicants informed of the status of their application and assist them during all phases of the application process. Students also participate in the "UCLA Experience," an all-day event at UCLA featuring presentations from academic departments, students, and faculty, as well as a campus tour.

RIVERSIDE

Transfer Admission Program

Students at participating community colleges who enroll in the required community college course plan and follow program guidelines will be assured admission to UCR.

The program includes advising sessions, articulation agreements, and individual student progress reviews.

SAN DIEGO

Transfer Admission Guarantee

The Transfer Admission Guarantee program (TAG) assists students at participating community colleges in transferring to UC San Diego. TAG students enter into a contract that specifies requirements to be satisfied at a community college and guarantees admission to the college of choice at UCSD. Admission to impacted majors, such as Computer Science and Electrical Engineering, is not guaranteed.

Participating community colleges offer transferable courses, called TAG core courses, which help students satisfy a portion of the general education requirements. UCSD and the community colleges sponsor "TAG Day" workshops each fall to discuss the program with interested students.

To transfer to UCSD through TAG, students must meet the University's minimum admission requirements for transfer students, including completion of at least 56 transferable semester units, earn a specified minimum GPA and be in good academic standing; clear all subject omissions/deficiencies in English and mathematics, complete all TAG core courses with a grade of C or better, and complete additional courses as recommended by the specific UCSD college the student plans to enter.

SANTA BARBARA

Transfer Support Services

UC Santa Barbara offers a variety of services to assist community college students in transferring to UCSB. UCSB maintains general education articulation agreements with all California community colleges as well as major preparation articulation agreements with 15 feeder community colleges.

Additional services available to community college students in Kern, San Luis Obispo, Santa Barbara, and Ventura counties include on-site application and financial aid workshops and individual academic advising.

SBCC/UCSB Transition Program

The SBCC/UCSB Transition Program helps Santa Barbara City College (SBCC) students transfer to

UCSB. General education and major preparation articulation agreements, revised annually, allow students to plan appropriate programs of study. Orientation and group advising sessions coupled with individual counseling keep students informed of the University's admission and application procedures and provide support throughout the transfer process.

The SBCC/UCSB admission agreement assures SBCC students who meet certain scholarship and other requirements of admission to UCSB. Transition Program participants are eligible for the combined enrollment program, which allows SBCC students to complete courses at UCSB that are not available at SBCC. Students are also eligible for special scholarships and priority admission consideration.

Transfer Achievement Program (TAP)

The Transfer Achievement Program (TAP) provides SAA, low income, and disabled students at Santa Barbara City College with individual services to assist them in transferring to UCSB. TAP students are guaranteed admission to UCSB upon completion of program eligibility requirements. Students also receive financial assistance in the form of grants that may be applied to fees, books, and tutorial support.

SANTA CRUZ

Guaranteed Admission for Transfer Entry (GATE)

The GATE program at UC Santa Cruz offers guaranteed admission to qualified junior level transfers from participating California community colleges. To participate in GATE students must have a minimum of 30 UC transferable semester units (45 quarter units) and no more than 80 semester units (120 quarter units) of coursework, have a GPA of at least 2.6, and be registered at one of the nearby community colleges. Prior to transfer, students must complete at the participating community college at least 30 of the 56 semester units (45 of 84 quarter units) required to be eligible for admission.

The GATE program offers guaranteed admission for the fall quarter only. Applications must be submitted by October 31 for admission in the fall of the following year.

Transfer Program

The UCSC Transfer Program provides a variety of services to community college students interested in transferring to UC Santa Cruz. Services include transfer workshops, individual counseling appointments, and campus tours. Admissions outreach counselors visit regularly many of the community colleges in central California, providing the services listed above as well as workshops for counselors and reentry, EOPS, and disabled students.

NOTE: the following material is adapted from unpublished information from the University of California, Los Angeles.

UNIVERSITY OF CALIFORNIA, LOS ANGELES

The Center for Academic Interinstitutional Programs (CAIP) sponsors programs to enhance transfer from community colleges. A brief description follows.

Transfer Alliance Program (TAP)

A transfer and retention program, TAP is designed to improve access and performance of transfer students with particular attention to underrepresented students (i.e., low income, racial and ethnic minorities, first generation college attenders). Twelve community colleges in the Los Angeles area participate by offering a core of enriched courses to meet general education requirements as well as prerequisites for majors in the College of Letters and Science. The students who complete the program receive guaranteed consideration for priority admission to UCLA. Begun in 1985, transfer of TAP-certified students began in 1987. Preliminary evaluation results indicate that these students perform better at UCLA than other transfers with similar GPAs before transfer. Ethnic minority students in TAP performed at a higher UCLA GPA than those not in the program.

Community College Scholars Community college faculty were selected on a competitive basis to provide leadership in their discipline for curriculum enhancement and articulation among community college, four-year postsecondary and high school faculty. Each receive a stipend and staff support from CAIP and will provide leadership to the Academic Alliances and Staff Development Workshops described below. The discipline areas are Physical Sciences, English Composition, English as a Second Language, Humanities/Literature, Ethnic and Gender Studies, Life Sciences, Foreign Languages.

Academic Alliances and Staff Development Workshops The alliances consist of community college, California State University, University of California and high school faculty and focus on research and development in particular disciplines. Advisory committees establish the program which usually consists of three to four events per academic year per discipline.

The staff development workshops for community college instructors focus on effective teaching techniques such as Writing Across the Curriculum, Cooperative Learning.

Supergraduate Program

CAIP provides support and consultation to West Los Angeles College, a TAP college, and Hamilton High School for the Supergraduate Program where high school students, particularly racial and ethnic minority students, participate in an enriched program which includes college courses in high school to develop academic skills and motivation to aspire to college completion.

College of Letters and Science Articulation To assist with preparation for transfer, CAIP maintains articulation agreements with 34 community colleges and provides information on pre-major requirements, transfer core curriculum as well as College of Letters and Science general education requirements.

The UCLA Office of Undergraduate Admissions and Relations with Schools (UARS) cooperates with CAIP on the above programs and, through its Outreach

Program, provides the Community College Transfer Program with particular emphasis on preparation and recruitment of underrepresented students. Program staff visit the participating community college campuses several times a month, providing pre-admission evaluations, admission, counseling, and workshops on a variety of topics such as choosing a major, financial aid, academic support services, and study skills.

All UCLA Transfer Initiatives have as a primary focus the transfer of Ethnic Minority Students. (For instance, the TAP colleges are expected to duplicate their demographics in their transfer student populations.)

LOS ANGELES SOUTHWEST COLLEGE

Transfer Initiatives

Lockheed Technical Development Program Since 1984, LASC has participated in a special program to increase the number of Blacks and Hispanics graduating in engineering and computer science. Approximately 25 students each semester obtain stipends for books and supplies, special academic advisement, field trips to Lockheed facilities for motivation and encouragement to complete the academic requirements for admission to four-year engineering programs.

Student Preparatory Achievement Retention Center In 1988, the college was funded to provide special assistance to 200 first generation college enrolled minority students to assist in their retention and eventual completion of a four-year degree.

Middle College High School During 1989, LASC and the L.A. Unified School District obtained a Ford Foundation Grant and State Pilot funds to develop a high school on the La Guardia (New York) model,

on the LASC campus. The at-risk students showing academic potential are being hand-picked to attend three years of high school and involvement in selected college activities to encourage their retention and eventual matriculation in the college. The ultimate goal is that the students will proceed to complete college or university degrees.

Urban Alternative Transfer Partnership Beginning in Spring 1990, LASC is developing new courses and strengthening its transfer curriculum in cooperation with UCLA's Center for the Study of Urban Poverty and its Center for Academic Interinstitutional Programs to enable students to learn the theory behind the issues of urban poverty and develop skills to become employable after graduating. This is viewed as an alternative model for urban institutions to impact upon the poverty cycle and educational achievements of disadvantaged minority students while providing a bridge to higher education and professional career choices.

Transfer Center A director has been appointed and the college administration has committed to meeting the UCLA Transfer Alliance Program requirements to ensure student readiness for admission to UCLA. By offering the appropriate courses in a timely manner to allow students the opportunity to achieve their goals to transfer, the college will enable students who are otherwise capable, to move forward with fewer obstacles.

Upward Bound Beginning in Spring 1990, LASC will conduct a program for 50 Black males in feeder high schools who will be encouraged to remain in school and eventually consider college.

NOTE: The display on the next page is reproduced from the University of California, Davis, Community College Symposium, March 9, 1990.

UNIVERSITY OF CALIFORNIA TRANSFER AGREEMENTS 1989-90

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		X	X		X	X	X	X	Offers some form of admissions "guarantee" to community college students one or more years in advance of transfer
X									Offers admission guarantees to freshman applicants who can't be accommodated provided the recipient attends community college for a period of two years
				X					Gives "priority" to transfers from particular colleges participating in a campus-to-campus program
	X			X					Program contains strong faculty-to-faculty element
				X					Imposes certain responsibilities on community colleges for participation, i.e. providing prescribed counseling, offering certain transfer course work
X	X	X	X	X	X	X	X	X	Provides regular contacts (representatives) from campus to assess student transcripts and counsel students
	X	X			X			X	Currently able to admit all eligible community college transfer applicants
X	X		X	X					Requires GPA higher than 2.4 for guarantee, at least for some majors at advanced standing level
	X				X		X	X	Guarantees admission to major of choice provided certain academic conditions are met
		X				X			Provides guarantee only for non-impacted majors
X	X		X				X		Guarantee program has been in operation for a period of at least three years
X	X		X		X	X			Has a substantial number of impacted programs at the advanced standing level

Together these constitute the "guarantees" enumerated in the Master Plan Report

* except Engineering and Business Administration

** except Engineering and Computer Science

Source: University of California Davis, Community College Symposium March 9, 1990

Appendix B

California State University Transfer Efforts

THIS IS an attachment to an agenda item from the January 10-11, 1989, meeting of the Committee on Educational Policy, California State University Board of Trustees. The item was titled *Transfer The Key to the Master Plan*, and the purpose of the report was to consider how the California State University can work more closely with the California Community Colleges to support the renewal of the transfer option. The chart covers intersegmental efforts to improve transfer, and covers access, with an

emphasis on underrepresented populations, transition, focusing on coordination and articulation, academic enhancement, specifically issues amenable to faculty efforts, and general education, to improve transfer of common general education courses.

Each effort documented lists the current status of the project, action to be taken, unit/division responsibility, the process to be taken, and consulting bodies, timeline, and resource implementation.

The California State University Transfer Renewal

Item	Current Status	Action	Unit/Div. Resp.	Process/Consult.	Timeline	Resource Imp'ts.
A. ACCESS: Ways to encourage CCC students to transfer to CSU emphasis on underrepresented populations						
1. Transfer compact, contract upon meeting criteria stipulated by participating institutions. CSU campus "guarantees" admission via a formal signed "contract" with student.	At least eight CSU campuses have initiated this approach with approximately 20 CCC's, appears to have "Hawthorne effect" even though it reflects longstanding CSU policy; students find it safe, appealing and reassuring.	Expand. Practice is growing in both UC and CSU; some campuses are expanding to include impacted programs, especially useful for educational equity populations. Generally conducted at regional level within campus service areas.	C/O take the lead - AAES, consultation with Academic Programs as needed. Campuses initiate process and expand to as many depts./majors as requested or appropriate.	Implementation at local level, consultation with academic depts./majors, joint CCC/CSU discipline faculty meetings needed prior to implementation. Relations with Schools: offices develop forms, disseminate and process, regional intersegmental counselor groups may be able to implement agreements.	Proceed immediately.	Limited. Admissions and Relations with Schools staff should assume responsibility for implementation of transfer contracts.
2. Development of common or compatible data systems with elements suitable for tracking progress of prospective transfers.	Some local/regional activity has begun, primarily through existing transfer center initiative, no systematic approach at present.	Expand. Needs to occur at statewide CCC and CSU C/O levels as well as in local regions. Goal is to maintain systemwide contact with prospective transfers, critical for maintenance of CSU contact with prospective transfers and for faculty pre-major assessment.	C/O - AAES, Analytic Studies, Campus IR units and student affairs (admissions, financial aid and student services component).	Joint CCC C/O and CSU C/O design systemwide data base, review any existing data tape analyses, collaborate with UC efforts.	Systemwide effort completed by June 1990. Local efforts should be in place within a reasonable period following completion of systemwide effort. Should move in sync with CCC matriculation programs.	Staff support needed to develop and implement a data system, probably based on IBM or compatible microcomputers. Staff will explore alternatives and determine appropriate funding level.
3. Improvement in CCC student pre-transfer advising using technology and new data base.	Limited sharing of data on CCC pre-transfer between CCC's and CSU's.	Implement pilot programs emphasizing use of data bases developed in #2 above.	C/O - AAES, campus admissions and evaluation units, counseling offices in CCC's, CSU departmental faculties.	CCC AND CSU C/O assess in implementation, monitor and assess effectiveness. Local campuses engage in pilot efforts.	Pilots selected by spring 1990.	Consider funding through RFP process of at least 5 pilots to implement computer-based academic advising system at \$0K per pilot, ultimate goal would be systemwide implementation.

The California State University Transfer Renewal

Item	Current Status	Action	Unit/Div. Resp.	Process/Consult	Timeline	Resource Imp'l's.
4 Outreach to CSU eligible community college students particularly those from underrepresented ethnic populations.	A few campuses seeking enrollment growth have targeted this group	Effective "pipeline" approaches should be developed for this group those who remain with CCC's for two years (or 55+ units) should receive special academic (major) advising and student services counseling, particularly for Financial Aid	C O - AAES provide impetus and direction; campuses implement plans jointly with CCC's.	Work closely with CCC's to target identify and support students interested in transfer	Immediately	Limited Targeted outreach to CCC students should be given greater priority by campus outreach units
5 Transfer Centers - Provision of transfer advising and services to targeted underrepresented CCC students.	Fourteen CSU campuses are currently participating in the intersegmental project, CSU representatives visit targeted community colleges on a routine basis to meet with prospective transfer students. Preliminary results of an external evaluation indicate that the centers have been effective in improving transfer information available to community college students, promoting articulation of curricula across segments, and increasing the involvement of faculty in outreach services.	Expansion of CSU's participation in the Transfer Center project should be supported. Since the majority of Hispanic and Black college students are enrolled at the community colleges, and since these groups continue to be underrepresented in the CSU outreach efforts should be increased significantly	C O - AAES should take the lead in trying to secure additional Transfer Center funding	Consider recommending support for a budget change proposal for 1990-91	1990-91	Approximately \$1,000,000 to CSU to expand the Transfer Center program to 20 additional community colleges, CCC has submitted budget requests to expand this program.
6 Project ASSIST - Improvement in articulation information to students via use of computerized data base	Ten CSU campuses are funded for ASSIST, a computerized articulation system which provides students with a cross reference of transfer course credit as well as courses applicable to CSU general education requirements. A report on ASSIST software completed by an external evaluator indicates that the ASSIST software is operational and is currently being used in the advisement process at some campuses.	ASSIST has been endorsed by the CSU Chancellor's Office, its implementation should be encouraged at all CSU campuses. ASSIST enhances transfer outreach by providing on site computerized evaluation of transfer credit both progress toward the major and toward completion for general education requirements. Funding should be requested to expand CSU's participation in ASSIST	C O - AAES should take the lead in securing funding.	Consider recommending submission of a budget change proposal for 1990-91	1990-91	Approximately \$550,000 to expand ASSIST to 9 more campuses, installation costs to be followed by annual support to maintain and update course lists and articulation agreements
7 Development of articulated career education programs (2+2) to the baccalaureate	At least five CSU campuses have initiated special means of articulating CCC career education programs, both AA's and certificate, to the baccalaureate. In 1988 resources become available through legislative action to fund up to 20 specific 2+2 career education projects. Twelve CSU campuses are included in the projects selected for funding. CCC is mandated to establish intersegmental faculty advisory councils for vocational areas.	CSU campuses should encourage appropriate departments and majors to work with local community colleges, as well as ROP's, business and industry to identify areas of need for baccalaureate education and to work within existing curricula to design programs for community college students desiring advancement. CCC and CSU campus outreach staffs can develop means of effectively disseminating information on availability of new opportunities, as can local business and industry	CSU & CC C O 's AA - monitor, encourage and assess, CSU school deans and AVP's responsible for encouraging such linkages in appropriate majors with counterparts in CCC's	Basing this approach on faculty initiatives the consultation with local business and industry is critical, needs assessment should be jointly conducted by CSU and CCC's.	State-funded programs began December 1988, some CSU-established programs have been in place for several years, new programs can be explored immediately	Limited Some released time for implementation and coordination of programs may be required

The California State University Transfer Renewal

Item	Current Status	Action	Unit/Div. Resp.	Process/Consult.	Timeline	Resource Imp'ts.
8 Improvement in CSU systemwide and campus outreach materials for CCC students	C.O. produces "CSU and You: A Guide to Community College Transfers" scheduled to be revised and distributed in spring 1989; also, produces video "CSU: What a Difference!", both are distributed to all CCC's. Dearth of campus outreach materials specifically targeted to transfers.	Expand and improve - particularly campus materials, target transfers including ed equity populations and older students, increases in Black and Hispanic enrollments in near future will depend largely on effective recruitment from CCC's. Campus should review materials, significantly develop or reprioritize resources to assure adequate outreach to CCC's.	C.O. AAES, CSU campus CIO's outreach/recruitment and articulation personnel	Recommend advisory groups comprised mainly of community college representatives	Proceed immediately with a goal of improved campus materials by fall 1989.	Campuses should review materials, develop or reprioritize resources to assure adequate outreach to CCC's, C.O. costs for revision booklet have been allocated for 1988-89. Additional resources needed for new video and posters.
B. TRANSITION Programs and approaches designed to smooth transfer and eliminate real or perceived barriers.						
1 Improve coordination of transition/orientation programs between CCC student services and CSU student affairs areas.	Transfer centers have assisted in some areas but have not had significant impact on broader spectrum of services specifically for transfer students	Appoint a joint CCC/CSU task force to review student services and delivery systems in both segments. Identify similarities and differences and assign a joint committee of student affairs officers from the segments to develop new models and guidelines	CCC C.O., CSU C.O. - AAES	Appropriate V.C.'s in each segment appoint the task force, should include representatives from a wide range of student services used by those considering transfer and those who do transfer	As soon as possible.	Limited. Some resources for travel and O&E not to exceed \$5,000
2 Improve articulation of financial aid policies, practices and information dissemination in the two segments	Differing policies for application and award of financial aid are confusing to students, both information dissemination and allocation practices should be renewed with the objective of better coordination	a. Support lottery proposal for experimental outreach to CCC Cal Grant B recipients. b. New CSU Financial Aid Advisory Committee prioritize this issue	CCC - C.O. and CSU C.O. - AAES Financial Aid and Outreach offices.	Disseminate recommendations of Financial Aid Advisory Committee to staff in both segments, if policy change required, develop necessary legislation and consultation with Student Aid Commission	a. A proposal has been submitted for pilot funding from lottery revenue. b. Preliminary recommendations from Financial Aid Advisory Committee by November 1989.	a. Will pursue \$14,700 of lottery funds. b. Unknown.
3 Transfer student pre-CSU enrollment diagnostic testing and follow-up in mathematics and English (Mathematics)	A few community colleges currently are experimenting with use of the Math Diagnostic Testing Program (MDTP) in Algebra I and/or Intermediate Algebra to assess for CSU General Education requirements in Quantitative Reasoning conforms in purpose to CCC assessment philosophy as a component of matriculation plan	Expand testing of community college students anticipating transfer to CSU, passing at intermediate level indicates probable G.E. readiness, provides excellent tool for diagnosing mathematics deficiencies which could/should be remediated at CCC level.	MDTP funded in CSU through API (college level) and CAPP (K-12 level) AA/RD	CCC - Identification of testing instruments at campus discretion subject to CCC C.O. approval consultation required at both state and local levels - both faculty and administrators	At least one year to familiarize CCC faculty and administrators with MDTP program, begin fall 1989.	Approximately \$500,000 is needed to implement pre-enrollment diagnostic testing for CCC students
(English)	CCC/CSU faculty are recommending the use of EPT to place CCC students in composition courses, this would improve CCC transfer student performance in CSU writing related curricula and in satisfying CSU GEAR, currently CSUSB involved in regional holistic scoring with local CCC's.	Should be expanded statewide to include additional regional efforts, this type of writing assessment should be institutionalized for all CCC students anticipating transfer: training of faculty in scoring will aid course articulation	CSU C.O. AAES and API	CCC C.O. - fund for educational improvement. Local CCC & CSU develop projects, regional conferences needed.	Projects can begin immediately as local resources permit, statewide efforts will hasten the process.	RFP currently in field that includes such joint ventures, some CCC's unlikely to participate unless additional funds are made available.

The California State University Transfer Renewal

Item	Current Status	Action	Unit/Div Resp.	Process/Consult.	Timeline	Resource Imp'ts.
4. Develop transfer clubs/organizations at both CCC's and CSU's	A few community colleges have developed transfer clubs that are well received and successful such organizations have not been developed on CSU campuses.	Identify a few CSU's and corresponding CCC's to further develop this effort; CSU student participants could serve as interns and/or mentors to prospective transfers emphasize underrepresented students and use academic disciplines as a base for outreach operation, incorporate career planning component	CCC and CSU C O's develop plan to select campuses that are receptive to the idea, implementation at local level	C O's monitor and assess effectiveness of approach.	Planning and identification of campuses spring 1989	Limited
5 EOP EOPS pilot projects assess impact.	Seven CSU's and 50 CCC's currently involved in pilot effort to improve transfer and ease transition, operational for two years, final report to CPEC due September 1990.	Assessment of second year of operation in progress, completion anticipated by January 1989; if positive, anticipate future expansion	CSU - C.O AAES CCC - C O EOPS	Assessment to be shared broadly with participating colleges, decision on expansion resides with segmental C O's and CPEC	If expansion proposed, implementation should begin spring 1990.	None
6 Development of "transfer centers" on CSU campuses.	At least two CSU campuses have established such centers community college counselors recommend that CSU campuses adopt this practice.	Expand systematically as part of orientation-transition services for CCC transfers, primarily a referral center with some special assistance in adapting to university expectations.	C O - AAES local campus student service units.	Consultation with representative sampling of transfer students enrolled on CSU campuses to ascertain types of assistance needed, collaboration with Learning Assistance Centers, academic advising and retention programs, request input from CCC counselors.	Campuses currently funded for Transfer Centers may be able to initiate immediately; others will require review and reorganization of resources.	At least one half-time person and minimal operational expenses are needed to implement this effort, total initial cost to system \$570K.
7 CAN system - Intersegmental effort to assign California Articulation Number to commonly taught lower-division courses that can be used "in lieu" of each other to fulfill certain transfer requirements.	Has been studied and identified by CPEC as the course numbering system of most promise for California CAN management through CSU Sacramento and intersegmentally funded, currently 82 CCC's, 14 CSU's and 2 UC's have qualified and approved CAN numbers for 2 972 courses, 1988-89 CSU budget provides special funding to enhance articulation and implementation at selected campuses, Chancellor Reynolds has issued formal written support to campuses.	Expand to all CCC's, CSU's and UC's.	CCC and CSU Chancellor's Office and UC President's office provide resources and assume leadership, project endorsed by CCC and CSU academic senates, on campuses, faculty, and articulation staff responsible for implementation	Broad consultation through intersegmental advisory board for three years, further consultation needed with campus faculties.	Ongoing; however, segments should commit to all campuses identifying at least 20 CAN courses by 1990	Effective process requires a full-time articulation officer on each campus, some involvement possible with existing resources, but is a major undertaking for large campuses, i.e., PCP for 1988-89 provides approximately 50K to each of four large CSU campuses that collectively admit about 20,500 transfers annually
C. ACADEMIC ENHANCEMENT Academic programs, advising articulation and curriculum specifically issues amenable to faculty efforts						
1 API resources for joint CCC/CSU faculty projects.	API funds are currently allocated to joint projects with CCC in subject areas Napa conference in 1987 laid the groundwork for regional projects in English and mathematics in 1988-89	Expand and modify to include additional subject areas and majors, efforts should continue to focus on joint faculty identification of competencies expected as outcomes of lower-division coursework and content mastery requisite for entrance to upper-division study	CCC C O and CSU C O - AAPP responsible for systemwide funding, general direction and outcome assessment, CSU campuses responsible for development of regional approaches with CCC's.	Continue CSU and CCC faculty consultation through subject area conferences similar to 1987 Napa conference, encourage use of intersegmental competency statements and translation of these standards into information to be used for curricular change or programmatic improvement	Ongoing, begin spring 1989 with preparation of 1990-91 BCP	Systemwide joint projects currently funded at \$50,000, will consider recommending 1990-91 BCP that would increase system funding to \$70,000 to match CCC contribution

The California State University Transfer Renewal

Item	Current Status	Action	Unit/Div. Resp	Process/Consult.	Timeline	Resource Impl's.
2. Joint CCC/CSU review of transfer academic advising.	Transfer academic advising in CCC's is primarily a function of counseling centers, limited CCC faculty involvement, academic advising for upper division (major) students in CSU is primarily a faculty responsibility, increased involvement of CCC faculty is needed (currently under discussion in CCC Statewide Senate).	Initiate a joint faculty/counselor review process with staff support from outreach and articulation areas, goal is to establish consistent, knowledgeable academic program-centered advisement reflecting curricula cohesion between the segments for CCC students	CSU Academic Senate CCC C O and CSU C O staff AAPP and AAES	CCC and CSU C O's and representatives from Academic Senates develop charge and recommend membership of joint committee appointed by respective chancellors.	Appoint committee spring 1989, report and recommendations due December 1989	Limited Possible resource implications if survey is recommended by the joint committee
3. Development of regional articulation councils	At least eight formal intersegmental regional councils currently are operational. In most cases these are comprised of administrative and/or program staff who are responsible for transfer/articulation generally effective in addressing practices that enhance and ease the transfer/transition process.	Expand and modify to include greater faculty participation, all CSU campuses should actively participate in such regional councils or assume leadership in their development where they do not exist. Structures should be used to enhance faculty participation through the disciplines (majors)	C O - AAES provide encouragement, monitor and assess effectiveness, leadership in faculty participation at the local level should come from AAPP's, department heads, and campus academic senates/councils, course content and mastery issues and expected competencies increasingly be the focus of such councils.	Campuses assess effectiveness of councils/consortia and seek to enhance their utilization as a primary means of improving articulation and establishing faculty interaction	Immediate and ongoing	None. Campus participation should be considered a basic component of overall approach to enhancement of transfer function
D. GENERAL EDUCATION Improve policy for transfer of general education courses, address inconsistencies among CSU campuses develop common certification forms for certifying coursework. Work toward automated certification on transcript.	Inconsistent policy implementation can increase time to degree and may affect access to CSU. CSU, CCC, UC are developing a common transfer curriculum, some aspects still to be resolved, CSU Senate to take action in January 1989	Certification forms need to be developed at system level in both CSU and CCC	C O take the lead AAPP working on transfer policy, AAES assists with certification	C O staff and Academic Senate consultation, informational meetings with campus departments and faculty G E Advisory Committee takes the lead.	Ongoing.	None

Grants to Research Projects from the Organization of the State Higher Education Executive Officers

Appendix C

Arizona

Minority Education Access and Achievement Cooperative **Arizona Board of Regents**

This cooperative -- "Our Common Commitment" -- is intended to be the catalyst uniting the three education governing boards. The initial goal is the development and implementation of a comprehensive state plan for improving minority achievement in public education. Four pilot projects have been funded involving the University of Arizona, Arizona State University, and various community colleges. The charge of the cooperative is to assist Arizona educational institutions in the fulfillment of their teaching, research, and administrative functions through cooperative planning, development, and use of telecommunications.

Colorado

Systemwide Database and Institutional Support for Minority Student Achievement **Colorado Commission on Higher Education**

To ensure that policies are implemented and evaluated for continual improvement, the state needs tracking mechanisms to analyze the data collected. Such a mechanism could be used to monitor the system's performance, identify exemplary programs, develop financial incentives, and provide information on which to base improvement. A Student Unit-Record Data System (SURDS) has been developed, organized around each identified student. The system contains data on financial aid and degrees awarded, as well as enrollment each term he or she enrolls. The database is essential in tracking the progress of minority students and in developing accountability measures in enrolling, retaining, and graduating minorities. Successes will be identified by both degree major and institution, and on-

site studies of exemplary programs will be conducted. Factors present in such programs will be promoted by developing funding and policy initiatives.

Illinois

Improvement of Minority Student Baccalaureate Achievement Through Transfer **Illinois Board of Higher Education**

The goal is to increase the Black and Latino cohorts in the transfer group, while developing an evaluation system that will be tied to the funding of "minority initiatives." The initial activity was a review of the literature on transfer to identify barriers and success factors, leading to revisions in state policy in seven areas to be incorporated into the Board's Master Plan policies. Four themes pervade this activity: encouragement, information, and guidance in grades K-14, faculty involvement in articulation, a hospitable campus climate with socialization of transfer students; and financial aid, with institutionalization of programs that increase retention. Special state funds have been appropriated that are used to achieve program goals -- for example, to establish transfer centers as part of the Minority Articulation Program. Another aspect of the project has been the development of a series of instruments to assess campus climate. Finally, a statewide data system has been developed to monitor transfer and student progress, with baseline data for the Fall 1988 term.

Massachusetts

Grant to Establish Two Collaborative Degree Programs in Teacher Education **Massachusetts Board of Regents of Higher Education**

The first goal of the project is to provide a frame-

work encouraging two- and four-year institutions to jointly develop programs to increase minority student enrollment in teaching. The project aims to address perceived cultural differences between two- and four-year institutions and increase the transfer rate into teacher education. Systemwide guidelines are being developed to improve general education programs, communication, and joint planning. Policy is being established to require regional collaborative degrees. Funding has been provided for two joint teacher education projects, in which dual of admission of high school graduates to both the community colleges and the state college is a feature of one that includes guaranteed transfer admission for recipients of the associate degree in liberal arts or elementary education. Improvement in accountability and student tracking is also sought in this project.

New York

*Jointly Registered Teacher Education Programs
to Improve Minority Baccalaureate Achievement*
New York State Education Department

The primary purpose of the program is to increase the number of minority students who complete a teacher education program and are eligible for initial certification for teaching. The Department sponsors many programs to encourage students to stay in high school and then -- for those who continue -- to complete college, but this specially funded project focuses on teacher education programs that involve ten pairs of two- and four-year institutions whose programs are jointly registered by the Department and thus offer students entering them certain guarantees and opportunities relating to access

to the upper division and financial aid. Students are jointly admitted at the freshman level and are guaranteed transfer after completing a negotiated associate-degree curriculum. A statewide conference has been held on this project and new programs are being developed for registration without special funding, the main problem being a cap on the number of students they can accommodate.

Ohio

Urban Demonstration Lab

The Ohio Case

Ohio Board of Regents

Putting successful access and retention strategies in place in a local community requires the consolidation of the strongest existing programs, the development of new intervention strategies, collaboration between public school and higher education institutions, and the leveraging of adequate resources. The Urban Demonstration Labs program implements the Master Plan formula for successful access and retention in seven metropolitan centers, with parallel programs being developed in rural counties. Retention to graduation and transfer is being addressed in strengthening the transfer function, by developing course articulation and dual enrollment. High school/community college tech prep programs are also being developed at many sites in the project. Emphasis has been put on local control in planning at the "laboratory" sites but competition among institutions tends to prevail, rather than collaboration and cooperation to achieve the state's planning goals.

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CALIFORNIA POSTSECONDARY EDUCATION COMMISSION

THE California Postsecondary Education Commission is a citizen board established in 1974 by the Legislature and Governor to coordinate the efforts of California's colleges and universities and to provide independent, non-partisan policy analysis and recommendations to the Governor and Legislature

Members of the Commission

The Commission consists of 17 members. Nine represent the general public, with three each appointed for six-year terms by the Governor, the Senate Rules Committee, and the Speaker of the Assembly. Six others represent the major segments of postsecondary education in California. Two student members are appointed by the Governor.

As of January 1994, the Commissioners representing the general public are:

Henry Der, San Francisco, *Chair*
C. Thomas Dean, Long Beach, *Vice Chair*
Elaine Alquist, Santa Clara
Mim Andelson, Los Angeles
Helen Z. Hansen, Long Beach
Guillermo Rodriguez, Jr., San Francisco
Melinda G. Wilson, Torrance
Linda J. Wong, Los Angeles
Ellen Wright, San Jose

Representatives of the segments are

Alice J. Gonzales, Rocklin, appointed by the Regents of the University of California,
Yvonne W. Larsen, San Diego, appointed by the California State Board of Education,
Alice Petrossian, Glendale, appointed by the Board of Governors of the California Community Colleges,
Ted J. Saenger, San Francisco, appointed by the Trustees of the California State University,
Kyhl Smeby, Pasadena, appointed by the Governor to represent California's independent colleges and universities, and
Frank R. Martinez, San Luis Obispo, alternate appointed by the Council for Private Postsecondary and Vocational Education

The student representatives are

Christopher A. Lowe, Placentia
Beverly A. Sandeen, Costa Mesa

Functions of the Commission

The Commission is charged by the Legislature and Governor to "assure the effective utilization of public postsecondary education resources, thereby eliminating waste and unnecessary duplication, and to promote diversity, innovation, and responsiveness to student and societal needs."

To this end, the Commission conducts independent reviews of matters affecting the 2,600 institutions of postsecondary education in California, including community colleges, four-year colleges, universities, and professional and occupational schools.

As an advisory body to the Legislature and Governor, the Commission does not govern or administer any institutions, nor does it approve, authorize, or accredit any of them. Instead, it performs its specific duties of planning, evaluation, and coordination by cooperating with other State agencies and non-governmental groups that perform those other governing, administrative, and assessment functions.

Operation of the Commission

The Commission holds regular meetings throughout the year at which it debates and takes action on staff studies and takes positions on proposed legislation affecting education beyond the high school in California. By law, its meetings are open to the public. Requests to speak at a meeting may be made by writing the Commission in advance or by submitting a request before the start of the meeting.

The Commission's day-to-day work is carried out by its staff in Sacramento, under the guidance of its executive director, Warren Halsey Fox, Ph.D., who is appointed by the Commission.

Further information about the Commission and its publications may be obtained from the Commission offices at 1303 J Street, Suite 500, Sacramento, California 95814-2938, telephone (916) 445-7933.

TRANSFER AND ARTICULATION IN THE 1990s

California Postsecondary Education Commission Report 90-30

ONE of a series of reports published by the Commission as part of its planning and coordinating responsibilities. Additional copies may be obtained without charge from the Publications Office, California Postsecondary Education Commission, Third Floor, 1020 Twelfth Street, Sacramento, California 95814-3985

Recent reports of the Commission include

90-13 Analysis of the 1990-91 Governor's Budget. A Staff Report to the California Postsecondary Education Commission (March 1990)

90-14 Comments on the California Community Colleges' 1989 Study of Students with Learning Disabilities. A Second Report to the Legislature in Response to Supplemental Report Language to the 1988 State Budget Act (April 1990)

90-15 Services for Students with Disabilities in California Public Higher Education, 1990. The First in a Series of Biennial Reports to the Governor and Legislature in Response to Assembly Bill 746 (Chapter 829, Statutes of 1987) (April 1990)

90-16 Standardized Tests Used for Higher Education Admission and Placement in California During 1989. The First in a Series of Biennial Reports Published in Accordance with Senate Bill 1416 (Chapter 446, Statutes of 1989) (April 1990)

90-17 Academic Program Evaluation in California, 1988-89. The Commission's Fourteenth Annual Report on Program Planning, Approval, and Review Activities (June 1990)

90-18 Expanding Information and Outreach Efforts to Increase College Preparation. A Report to the Legislature and Governor in Response to Assembly Concurrent Resolution 133 (Chapter 72, Statutes of 1988) (June 1990)

90-19 Toward an Understanding of Campus Climate. A Report to the Legislature in Response to Assembly Bill 4071 (Chapter 690, Statutes of 1988) (June 1990)

90-20 Planning for a New Faculty. Issues for the Twenty-First Century. California's Projected Supply of New Graduate Students in Light of Its Need for New Faculty Members (September 1990)

90-21 Supplemental Report on Academic Salaries, 1989-90. A Report to the Governor and Legislature in Response to Senate Concurrent Resolution No. 51

(1965) and Subsequent Postsecondary Salary Legislation (September 1990)

90-22 Second Progress Report on the Effectiveness of Intersegmental Student Preparation Programs. The Second of Three Reports to the Legislature in Response to Item 6420-0011-001 of the 1988-89 Budget Act (October 1990)

90-23 Student Profiles, 1990. The First in a Series of Annual Factbooks About Student Participation in California Higher Education (October 1990)

90-24 Fiscal Profiles, 1990. The First in a Series of Factbooks About the Financing of California Higher Education (October 1990)

90-25 Public Testimony Regarding Preliminary Draft Regulations to Implement the Private Postsecondary and Vocational Education Reform Act of 1989. A Report in Response to Assembly Bill 1993 (Chapter 1324, Statutes of 1989) (October 1990)

90-26 Legislation Affecting Higher Education During the Second Year of the 1989-90 Session. A Staff Report of the California Postsecondary Education Commission (October 1990)

90-27 Legislative Priorities of the Commission, 1991. A Report of the California Postsecondary Education Commission (December 1990)

90-28 State Budget Priorities of the Commission, 1991. A Report of the California Postsecondary Education Commission (December 1990)

90-29 Shortening Time to the Doctoral Degree. A Report to the Legislature and the University of California in Response to Senate Concurrent Resolution 66 (Resolution Chapter 174, Statutes of 1989) (December 1990)

90-30 Transfer and Articulation in the 1990s. California in the Larger Picture (December 1990)

90-31 Preliminary Draft Regulations for Chapter 3 of Part 59 of the Education Code, Prepared by the California Postsecondary Education Commission for Consideration by the Council for Private Postsecondary and Vocational Education (December 1990)

90-32 Statement of Reasons for Preliminary Draft Regulations for Chapter 3 of Part 59 of the Education Code, Prepared by the California Postsecondary Education Commission for the Council for Private Postsecondary and Vocational Education (December 1990)